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# Model MILITARY INTERNATIONAL

Issue 51 - July 2010  
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## DESERT DOG

Canadian Coyote Reconnaissance  
LAV conversion

## WEHRMACHT ON THREE WHEELS

GreatWall Hobby's 1:35  
scale BMW R75

## ONE WAY TICKET

BVM's 1:35 Zis-30 Tank Destroyer

**INSIDE:** DRAGON T19 ■ ITALERI LCVP ■ GREATWALL SWS FLAK  
37 ■ TRUMPETER CHALLENGER 2 ■ AND MORE...

July 2010 / £4.20 / Issue 51

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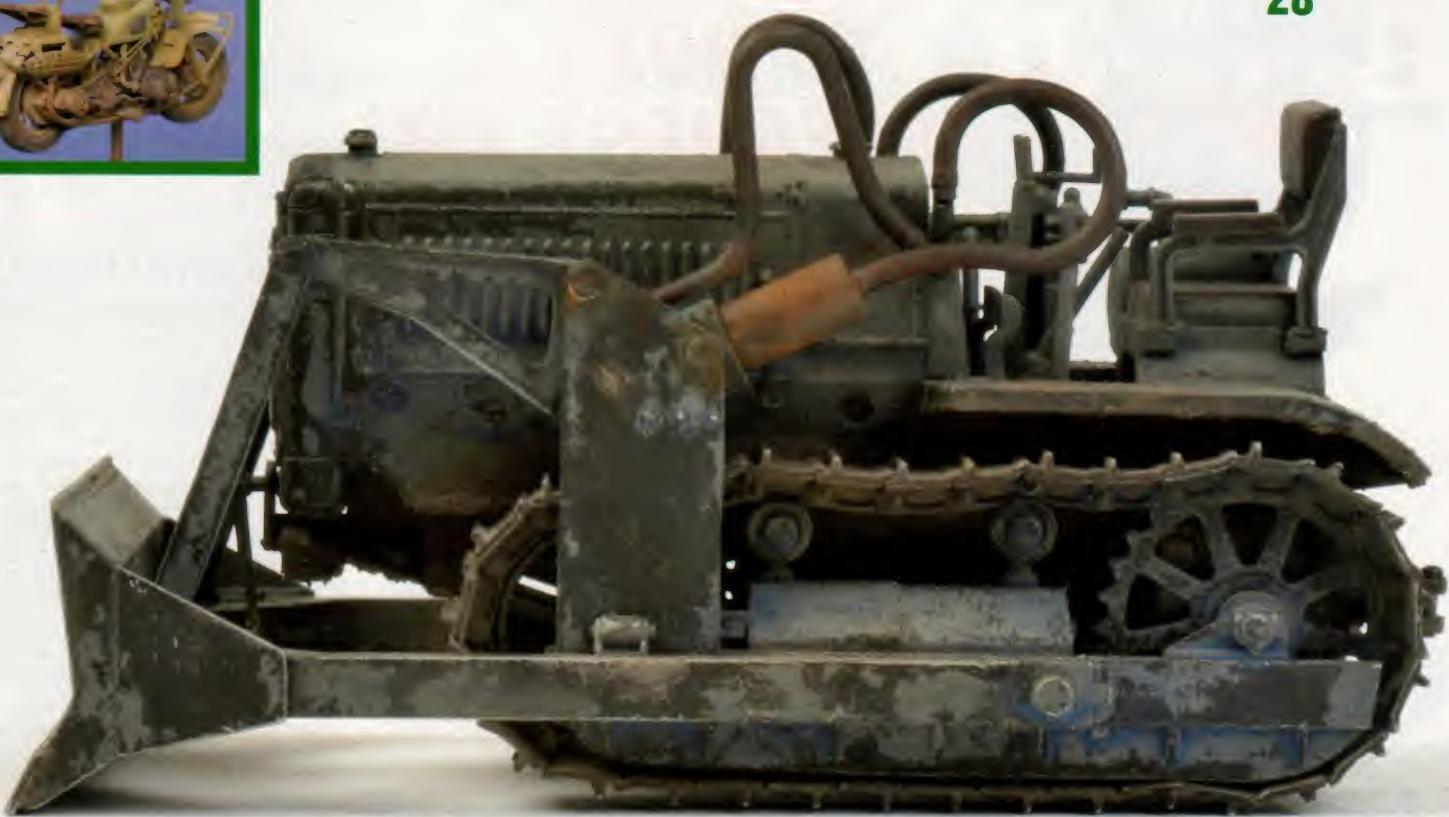
# Contents - Issue 51 July 2010

**Model  
MILITARY  
INTERNATIONAL**



34

28



## REGULARS

### p 4 NEWS

What's new in the world of military modelling

### p 40 LETTERS

Model Military International's visitors have their say

### p 50 FIGURES

Reviewing the latest figures to hit the market

### p 53 DIARY DATES

A listing of upcoming worldwide models shows and events

### p 54 SMALL SCALE

News and reviews in 1:76 and 1/72 scales

### p 56 INCOMING

MMI's thoughts on the latest kits and accessories

### p 58 1:48 SCALE

Luke Pitt explores 1:48 scale military models, figures and accessories.

### p 60 BOOK REVIEWS

A look at the latest titles on our doorstep

### p 66 LAST POST

Late breaking news and ramblings of the Editor

## FEATURES



6

### p 6 THINK TANK

Canadian Coyote by Jim Wechsler

### p 14 DESERT DOG

Jim Wechsler builds the Real Model 1:35 scale Coyote conversion

### p 24 AMPS 2010

Scott Taylor reports on the 2010 AMPS Show

### p 28 PUSHING DIRT IN TINY TOWN

Brett Green tackles the new 1:48 scale Tamiya Komatsu G40 Bulldozer

### p 32 PREVIEW

Dragon 1:35 T19 by Al Bowie

### p 34 WEHRMACHT ON THREE WHEELS

Greatwall Hobby's 1:35 scale BMW R75 with sidecar superdetailed by Tom Morgan

### p 42 ONE WAY TICKET

Jose Brito builds BVM's 1:35 scale Zis-30

### p 49 CAMOUFLAGE CORNER

Research and Colour Profile by William Marshall

### p 51 PREVIEW

Greatwall Hobby's 1:35 sWS Flak 43

### p 52 PREVIEW

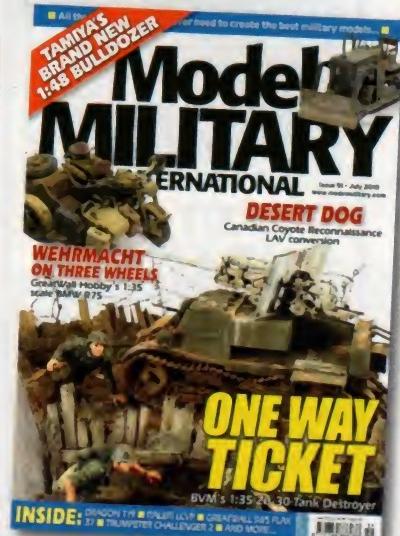
Italeri 1:35 LCVP + Jeep by Graham Tetley

### p 54 PREVIEW

Trumpeter 1:35 upgraded Challenger 2 Enhanced Armour by Andrew Judson



42



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Tel: (UK) 01525 222573

Fax: (UK) 01525 222574

Email: [enquiries@modelmilitary.com](mailto:enquiries@modelmilitary.com)

Address: ADH Publishing,  
Doolittle Mill, Doolittle Lane,  
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## SQUADRON TO HOST EAGLEQUEST XIX IN TEXAS

**S**quadron is hosting the EagleQuest 19 competition and convention from 24 June to 26 June 2010 at the Embassy Suites Outdoor World Hotel in Grapevine Texas.

EagleQuest is open to any Squadron customers who have purchased within the last twelve months, and will include door prizes, raffles, seminars, a welcome party and a banquet dinner / award ceremony.

There is a wide-ranging contest covering aircraft, armour models, ships, vehicles, figures, sci-fi/fantasy and more, from all eras. This year's theme award

is "Korean War Era". Entries for this theme have been expanded to include any post WWII subjects from 1945 to 1955.

Brett Green, Editor of Model Military International, founder of HyperScale and webmaster of Missing-Lynx, will be a guest speaker at EagleQuest.

For more information or to register, visit Squadron's website [www.squadron.com](http://www.squadron.com) and click on the EagleQuest XIX banner for detailed contest information and a registration form. You may also contact Richard Poulsen by telephone on 1-800-527-7427, extension 1060 (toll free in North America).



### ACCURATE ARMOUR SUPACATS AVAILABLE NOW

Further to our announcement of Accurate Armour's 1:35 scale Supacat kits in Issue 50 of MMI, both the six-wheel Coyote and four-wheel Jackal-2 are available now. Derek Hansen from Accurate Armour has supplied an image here of one of the completed models. For more details visit [www.accurate-armour.co.uk](http://www.accurate-armour.co.uk).



### LIFECOLOR RAIL WEATHERING SET

LifeColor has released a set specifically for Railway Weathering. Six different paints are supplied to paint your tracks and sleepers, or to dirty up your fresh-from-the-shed locos and rail cars. These include Frame Dirt, Track Dirt, Sleeper Grime, Roof Dirt, Weathered Black and Brake Dust.

These acrylic paints are conveniently packed in a six-pack, and will be equally applicable to military or civil railway applications.

Available online now from The Airbrush Company [www.airbrushes.com](http://www.airbrushes.com)



### MIRAGE HOBBY ANNOUNCES NEW 1:35 VICKERS-ARMSTRONG '6 TON' Mks. F/B

The Vickers 6-Ton Tank or Vickers Mark E was a British light tank designed as a private project at Vickers. It was not purchased by the British Army, but was picked up by a large number of foreign armed forces and was copied almost exactly by the Soviets as the T-26. It was also the direct predecessor of the Polish 7TP tank. By the start of World War II it was the second most common tank design in the world after the Renault FT-17 (source: Wikipedia).

Mirage Hobby from Poland has announced the release of a 1:35 scale Vickers-Armstrong '6 ton' Mk F/B Light Tank, Item No. 35510. This is a primarily injection-moulded kit with single-length vinyl tracks and markings for three vehicles - Bulgaria, Finland and Great Britain.

For more information check Mirage Hobby's website [www.mirage-hobby.pl](http://www.mirage-hobby.pl)



### NUTS & BOLTS 25



### NEW NUTS AND BOLTS FLAKPANZER IV BOOK

Right on time for the announced 1:35 scale Flakpanzer Ostwind (6550) and zimmerit Wirbelwind from Dragon, Nuts and Bolts announce an interesting new publication on the development and deployment of three Flakpanzer types based on the chassis of the Panzer IV: Flakpanzer IV - Wirbelwind (Sd.Kfz. 161/4), Ostwind & Kugelblitz. The new book will include 284 photos, of these 66 historical shots of the three types of Flakpanzer IV with all known variants in black and white, a number of them previously unpublished. 191 colour photos of surviving Wirbelwind vehicles, plus 27 colour photos of all three models from Tony Greenland are included. The title will also feature 11 pages of camouflage schemes and ammunition from Laurent Lecocq, and a table of organization of units using the Flakpanzer IV (Kriegstärke-Nachweisungen KStN). This book should be available now from Nuts and Bolts new website, [www.Nuts-Bolts.de](http://www.Nuts-Bolts.de)

### SOVIET VEHICLE BOOM CONTINUES

Fans of Soviet vehicles have never had it so good, especially in 1:35 scale. The latest entry into this hot market is MiniArt's 1:35 scale BA-64B Armoured Car and five figures.

The BA-64 was a 4x4 light armoured car, employed by the Soviet Army from 1942 into the early 1960s for reconnaissance and liaison tasks. The BA-64B was nicknamed 'Bobik' by its crews. Between 8,000 and 9,000 of these hard working little vehicles were delivered to Soviet Army units.



The model itself is a reboxing of the very nice Vision Models 1:35 scale BA-64, with five of MiniArt's own figures and markings for four vehicles added to sweeten the package.

With your Soviet collection expanding you'll need to feed your troops too. MiniArt has thoughtfully put together a Soviet Field Kitchen PK-42 package, with the mobile cookhouse plus four figures and accessories. This will offer some interesting diorama possibilities!



MiniArt products are available from Creative Models Limited [www.creativemodels.net](http://www.creativemodels.net)



## CANADIAN COYOTE LAV

Jim Wechsler describes Canada's current armed reconnaissance vehicle, the Coyote LAV

**A**rmed reconnaissance is as old as warfare. For the vast majority of human history, horse born soldiers have performed this essential task. But after World War One armies around the world started to look at using mechanized vehicles to perform this role. Initially, these were little more than lightly armed and armoured cars such as the Rolls Royce Armoured Car M1914 and M1920. While useful, it also became clear that a more dedicated vehicle was required and, by World War Two, most armies had specialized vehicles for this role.

For the western allies, the most common vehicles were the four-wheeled Staghound and the six-wheeled Greyhound. Both of these vehicles were derived from automotive and truck legacies and as a result they enjoyed considerable benefits in reliability, durability, and maintenance, especially in the field. In addition, both the Staghound and Greyhound had armour sufficient to protect against light arms fire

and a primary cannon, turret mounted, that was capable of knocking out unarmoured vehicles, lightly armoured tanks and on occasion a main battle tank with a well-placed shot.

In addition, these vehicles were fast on roads and their off-road mobility, while not as good as a tracked vehicle, was found to be quite acceptable. They also had one more very useful feature; stealth. Their automotive background made them generally quiet. Also, when they could be heard, they sounded much like other trucks so without direct line of sight, these vehicles were often not recognized as the enemy. This proved to be a highly useful characteristic even to this day. The US Army has noted the same benefit with its Stryker brigades serving in Iraq.

For the most part, the basic requirements for an armed reconnaissance vehicle have remained pretty similar since World War Two although the technology has certainly improved dramatically. The Coyote LAV is

Canada's latest vehicle to serve in this role, entering service in 1998. The Coyote is part of a family of Light Armoured Vehicles (LAV) that includes the US Marine Corps' LAV-25 and the Australian ASLAV-25 to which the Coyote owes its heritage. All of these vehicles can trace their lineage back to the

Swiss MOWAG produced Piranha series which was first produced back in the 1970s. This family of highly successful vehicles also includes the Canadian AVGP, the LAV III and the U.S. Army's Stryker to name but a few.

General Dynamics Land Systems- Canada built a prototype



Canadians a long way from home. Here is a Coyote loaded with improvised sandbag armour on duty outside Kandahar International Airport in Afghanistan.



This camouflage net is effective where it covers the deck.



A rare view from the top of a desert-camouflaged Coyote.



A Canadian Coyote dug in and flying the flag.

A vehicle from the same unit. On operations, a spare wheel is often carried on the front armour of the Coyote.



Coyote in 1992 and in 1993 Canada ordered 203 vehicles. There are three variants of the Coyote. The easiest one to recognize utilizes the 'Brigade Surveillance Suite' that has the sensors mounted on a 10 meter, telescoping mast. This sensor suite consists of the MSTAR radar, a long-range video camera, and a laser range finder. The MSTAR is capable of detecting vehicles to a range of about 12 km and people to a range of around 3 km. The video system also contains a thermal imaging capability capable out to about 3 km and out to 12 km in the visible light spectrum. The laser range finder is reported to have a range out to 10 km. This version of the Coyote is also the least produced variant with only 32 being produced.

The most produced variant uses the same sensors but mounted on a tripod which can be deployed as far as 200m away from the vehicle and is connected with a fiber optic

cable. 152 vehicles were purchased in this configuration. This configuration is called the 'Battle Group Surveillance Suite'.

The final 19 vehicles were not fitted with the surveillance sensors and are classified as 'Direct Fire Support Vehicles'. Now, an additional 37 vehicles with the 'Battle Group Surveillance Suite' have had it removed and are reclassified as 'Direct Fire Support Vehicles'.

In general, the Coyote's capabilities are quite unique and few other countries have a similarly dedicated reconnaissance vehicle.

To date, Coyotes have been deployed to many of the world's hot spots including Bosnia, Kosovo, East Timor, Haiti, and Afghanistan since 2002.

#### VEHICLE CAPABILITIES

The Coyote has a basic weight of 14.4 tons. It is 6.39 meters long,

2.5 meters wide, and 2.69 meters tall. It is an 8x8 wheeled vehicle with 4 wheel drive powered by a Detroit Diesel 6V53T engine that produces 275hp. It is reported that the vehicle can still operate with two wheels disabled on either side of the vehicle. The vehicle has a stated operational range of 660 km and a top speed of a whopping 100 km/h. Unlike its American and Australian cousins, it does not have amphibious capabilities. It is capable of air transport but in order to fit into a C-130 Hercules the turret must be removed. Purportedly, this is why the U.S. Strykers do not have a turret and instead use the less power remote weapons station.

The vehicle carries a crew of four, the commander, driver, gunner and surveillance suite operator. The driver sits in the front of the vehicle and to the left of the engine. The surveillance suite operator sits in the rear hull amongst the sensor displays and the commander and gunner sit in the turret.

The primary armament is the 25mm M242 'Bushmaster' chain gun which is the same gun used on the American LAV-25 and M2/3 Bradley as well as the Australian ASLAV-25. The gun can be fired in semi-automatic or fully automatic mode with dual feed capability. It can fire a variety of ammunition including high explosive (HE) and armour-piercing discarding sabot rounds. The rate of fire is 200 rounds per minute with a range of about 3,000 meters. The gun's high rate of fire makes it not only effective against ground targets but also against low flying aircraft, most notably helicopters. It is an externally powered (i.e. it uses power from the vehicle) design so it does not depend on a gas or recoil system. Originally developed by McDonnell Douglas (now Boeing) it is presently being produced by ▶



Loading ammunition through the side hatch. An interesting detail here is that the interior of the hatch retains its original green camouflage paint.



A group of off-duty Coyotes. Note that the muzzles of the Bushmaster main armament have been covered to protect the guns from dust and sand.



# Think Tank - CANADIAN COYOTE LAV



The turret is traversed to the rear on this operational Coyote.



The Brigade Surveillance Coyote is the rarest variant, with only 32 produced.



The 'Brigade Surveillance Suite' has sensors mounted on a 10 meter, telescoping mast. This sensor suite consists of the MSTAR radar, a long-range video camera, and a laser range finder.



The MSTAR is capable of detecting vehicles to a range of about 12 km and people to a range of around 3 km. The video system also contains a thermal imaging capability capable out to about 3 km and out to 12 km in the visible light spectrum.

## Alliant TechSystems.

The secondary armament is two FN MAG 7.62mm machine guns. One is internally mounted and fired co-axially with the main gun and the other is pintle mounted on the turret between the two hatches.

The Coyote also carries a number of defensive systems including 8 smoke discharges in groups of 4 mounted on the front left and right of the turret. It also carries a Laser Warning Receiver mounted on the top rear of the turret. This system detects incoming laser range finder beams and automatically displays the direction of the beam's origin to the commander and driver while also providing audible queues in the crew's headsets. Also, the Coyote carries a Ferret 3D passive acoustic small arms fire detection system. This advanced system provides bearing, range and elevation for small arms fire out to a range of about 1 km. Finally, the

Coyote has a Nuclear Biological Chemical (NBC) detection and monitoring system.

The basic vehicle body is a steel hull that can protect against small arms and artillery fire. Adding to the protection is a system of bolt on ceramic plates and it's rare to see the Coyote deployed without these installed.

Combat experience in Afghanistan showed that even more protection was required. Specifically it was identified that a set of hull and turret blast shields were needed. One set of shields encircles the hull hatches on the rear deck and the other does the same around the commander and gunner's hatches on the turret. These shields have enough armour to protect against small arms fire and incorporate ballistic glass to allow the crew an acceptable level of vision without exposing their heads above them. They are also designed to deflect the blast

and fragments of an improvised explosive device (IED), hence the name blast shields.

## THE COYOTE IN DETAIL

Looking around the vehicle, there are a number of additional items worth mentioning. On the front left corner of the upper hull is a small series of roller pins. The tow cable is threaded through this arrangement when winching operations are being conducted. The primary function is for self extraction though light towing and retrieval is also possible.

Behind the roller pins is a retractable cable cutter. Stringing cables across roadways has long been an effective combat technique. But the increased speed of mechanized vehicles now makes it downright deadly. The Germans used this technique quite effectively in World War Two and many allied personnel in Jeeps were killed. So the cable

cutters are now installed to protect both the crew and keep the cable from getting snared on the vehicle. A second cable cutter is mounted on the turret just to the left of the 25mm cannon.

Further up the hull and to the left is the driver's hatch. This hatch swings to the left for access and also allows the driver to stick his head out to drive in low threat environments. Otherwise he must use the three periscopes mounted directly in front of the hatch which provide decent, but limited visibility.

Along the left side of the hull are a series of tie downs, brackets, and baskets for stowing various items and the rack in the far back is for the pioneer tools. There is also a hull access hatch located between the second and third wheels.

On the right side is the engine exhaust and muffler along with more brackets and tie downs. The spare wheel is stored on the front

lower hull glacis.

The rear hull contains the twin access doors that are the primary ingress and egress point for the vehicle's interior where the sensor suite operator is located. On the top of the rear upper hull are two access hatches. In the infantry carrying versions of the LAV (including the LAV-25 and ASLAV-25) troops often stand in the hull with their upper body out of these hatches and their personal weapons at the ready to provide rear quarter defence of the vehicle.

The turret has three small stowage baskets on the left, right and rear. These are designed so as to avoid interference with the rear upper hull access hatches. Mounted off the rear basket are twin water can holders so it's not uncommon to see Coyotes loaded to the brim with gear. Mounted on the turret, just ahead of the rear basket on a mast is the Laser Warning Receiver. There are two hatches, which are for the commander and gunner. These can be locked in the open position to prevent them swinging forward and injuring the crew. They are heavy after all.

Ahead of the hatches are the large, forward viewing visors and in between them is the pintle mount for the FN MAG machine gun. On the front left and right corners of the turret are the smoke dischargers in groups of four. The main gun is of course in the centre and just to the right of it is the opening for the co-axial machine gun.

The large aerial on the left is the main communication antenna. Often seen mounted on this antenna are several upside down water bottles. These are used to hold a special infrared glow stick that can only been seen with night vision goggles. So they help the crews of different vehicles identify each other at night without giving away their position.

## THE FUTURE

Presently it is unclear if Canada will upgrade the Coyote. Many of these vehicles are in need of heavy maintenance/reset anyway due to their extended service in Afghanistan and their sensor and surveillance suites are in need of updating since they are now 15 years old.

Instead, Canada is looking to replace the Coyote with a Tactical Armoured Patrol Vehicle (TAPV) but the timing and definition of this vehicle have not yet been fully established. So for now, the Coyote continues to serve. ■



(Right) Coyote, front view.

An operational Coyote bristling with stowage.



Heading into a trouble spot.

A rare clear starboard side view of the hull with stowage, exhaust and fittings removed.



A Coyote undergoing maintenance and fitting.

Primary armament is the 25mm M242 'Bushmaster' chain gun.



An interesting study of a Coyote under a camouflage net with plenty of stowage and meal cartons on board.

Here is one group of four smoke dischargers mounted on the front of the turret. Another four dischargers are mounted on the other side of the turret.



Secondary armament is two FN MAG 7.62mm machine guns. One is internally mounted and fired co-axially with the main gun and the other is pintle mounted on the turret between the two hatches.

The Coyote is powered by a Detroit Diesel 6V53T engine that produces 275hp.



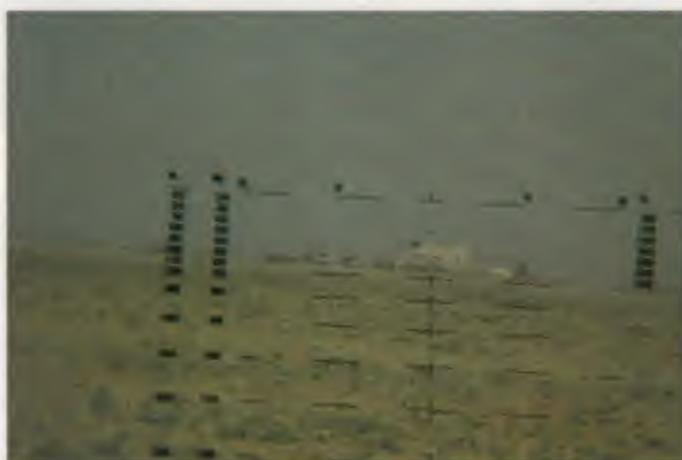
# Think Tank - CANADIAN COYOTE LAV



Some diorama potential here!



Canadian Coyote units operate within the Joint Coalition Task Force.



A Coyote Commander's eye view.



A good view of the Coyote's forward deck.



Home, sweet home!



Cresting a ridge in a Coyote.



Riding shotgun down a narrow road.



The Coyote is capable of operating in daylight or in darkness.



Ablutions in the field. The Coyote is home during long-range operations.



The vehicle has a stated operational range of 660 km and a top speed of a whopping 100 km/h.



Unlike its American and Australian counterparts, the Coyote does not have amphibious capabilities.



The Coyote's eight wide wheels offer excellent off-road performance.



A busy scene at a base near Kandahar International Airport.

#### Additional Reference

At the time of this writing, the only dedicated reference book is the new 'Coyote LAV in Afghanistan', which is about to be released by Real Models ([www.realmodels.com](http://www.realmodels.com)). The photos in this article are a subset of what will be available in that book and were kindly provided by Miloslav Hraban, the owner of Real Models.

# DESERT DOG



**Jim Wechsler transforms Trumpeter's 1:35 scale LAV-25 kit into the Canadian Coyote Reconnaissance LAV using Real Models' extensive multimedia conversion and their separate stowage set.**

The Coyote LAV is Canada's latest vehicle to serve in armed reconnaissance role, entering service in 1998. The Coyote is part of a family of Light Armoured Vehicles (LAV) that includes the US Marine Corps' LAV-25 and the Australian ASLAV-25 to which the Coyote owes its heritage. All of these vehicles can trace their lineage back to the Swiss MOWAG produced Piranha series which was first produced back in the 1970s. This family of highly successful vehicles also includes the Canadian AVGP, the LAV III and the U.S. Army's Stryker to name but a few.

General Dynamics Land Systems - Canada built a prototype Coyote in 1992. Canada ordered 203 vehicles in 1993. There are three variants of the Coyote. The easiest one to recognize utilizes the 'Brigade Surveillance Suite' that has the sensors mounted on a 10 meter, telescoping mast.

This sensor suite consists of the MSTAR radar, a long range video camera, and a laser range finder. The MSTAR is capable of detecting vehicles to a range of about 12 km and people to a range of around 3 km. The video system also contains a thermal imaging capability capable out to about 3 km and out to 12 km in the visible light spectrum. The laser range finder is reported to have a range out to 10 km. This version of the Coyote is also the least produced variant with only 32 being produced.

The most produced variant, called the 'Battle Group Surveillance Suite', uses the same sensors but mounted on a tripod which can be deployed as far as 200m away from the vehicle and is connected with a fiber optic cable. 152 vehicles were purchased in this configuration.

The final 19 vehicles were not fitted with the surveillance sensors and are classified as 'Direct Fire Support Vehicles'. Now, an

additional 37 vehicles with the 'Battle Group Surveillance Suite' have had it removed and are re-classified as 'Direct Fire Support Vehicles'.

#### THE MODEL

Real Model ([www.realmode.cz](http://www.realmode.cz)), a Czech Company, has been making a series of conversions and updates for various Canadian

vehicles over the past few years. The most notable have been their extensive conversions of the AFV Club Stryker to a Canadian LAV III. I've had the pleasure of making one of these. While complex, I found that the conversion was straightforward and the results were stunning.

So when Real Model came out with a conversion of the Trumpeter



The kits used in the model are the Trumpeter LAV-25, the Real Model Canadian Coyote 2008 with Blast Shield, and the Real Model Small Stowage Set for LAVIII.

USMC LAV-25 to the Canadian Coyote, I jumped at the chance to make one too. Real Model did not disappoint. While more complex than the LAV III conversion, this Coyote conversion is also pretty straightforward and the results, well, I'll let you be the judge.

It's worth noting that Real Model actually offers three conversions, all for the 'Direct Fire Support Vehicle' variant (DFSV) noted above. The most basic is for the Coyote without the supplemental hull and turret armour. This is a very straightforward conversion of the newer Trumpeter Australian ASLAV-25. But you'll be hard pressed to find this version of the Coyote in combat environments.

Their second conversion is for the uparmoured DFSV that is more commonly seen in action. This conversion involves a complete replacement turret and upper hull. It is designed to be used with the LAV-25 kit or the ASLAV-25 and there are advantages to both.

The final conversion is for the even more uparmoured version of the DFSV that includes the turret and hull blast shields and even more lower hull add-on armour. So this is a conversion of Real Model's own conversion noted in the last paragraph! It's worth thinking about it this way since it helps to understand the instructions, which are essentially two sets since they are a conversion of conversion. This is what I'll be modeling.

I must admit that I was disappointed that Real Models doesn't offer either the very cool 'Brigade Surveillance Suite' (the variant with the huge telescoping mast) or the 'Battle Group Surveillance Suite' (the variant with the sensors remotely deployed on tripods). But maybe they will be doing so in the future.

However, I realized that I could convert the DFSV to the 'Battle Group Surveillance Suite' (BGSS) variant by making a few small changes and buying some of the sensor parts. This variant deployed the sensors on two tripods. One contains the MSTAR radar system and the other contains the rest of the sensors that are all in a large assembly. I won't claim to be an expert on the Coyote but I believe that it is possible to deploy either set of sensors individually or together. So that gave me an idea.

Not too long ago I built Accurate Armour's Warrior OPV (Observation Post Vehicle) conversion. One of the most notable parts of this variant of the Warrior is that it has an MSTAR mounted on a large mast at the back of the vehicle. I contacted Accurate Armour and they were kind enough to sell me just the

MSTAR parts so I could use them on this model.

Thus, after a few other simple modifications, I'm going to model the Coyote 'Battle Group Surveillance Suite' variant with just the MSTAR deployed on a tripod. But I will confess to having a strong desire to make the variant with the huge mast so I'm going use some very weak glue on a few parts in case I want to scratch build the other sensors and the mast at later date.

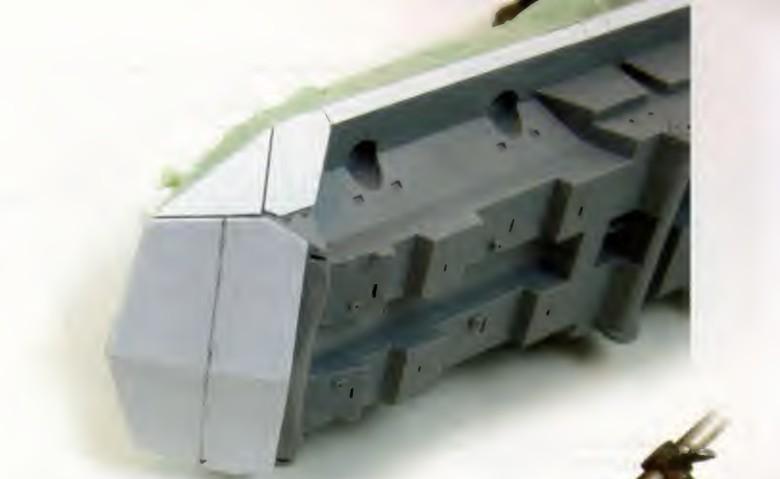
### CONSTRUCTING A PLAN

Having already built one of Real Model's conversion (the LAV III), I had the advantage of experience in knowing what order to tackle a complex conversion like this. The Real Model conversions contain a relatively small number of resin parts along with a lot of photo-etch. Thankfully, the photo-etch is made for Real Models by Eduard (also a Czech company) so the quality is excellent. Even better, the photo-etch comes with the same Eduard instructions you'll see in their own sets. I can't even begin to tell you how helpful this is. Adding to this are several photos of the model with arrows calling out where to put the resin parts. What's important to realize is that these are essentially two sets of instructions and you are not expected to follow them in order. Instead you should plan to go back and forth between the photos and the photo-etch instructions to work through each part of the model. Sounds confusing but once you get going, it's really no different than if you were to be adding an aftermarket photo-etch set to a kit.

In a similar thought, the basic conversion set is for the uparmoured Coyote. Then there is another conversion set for the version with the blast shields. So there is yet another set of photo-etch sheets and instructions. In some cases, the parts replace parts in the first conversion. Again, think of it as a conversion of a conversion. Then it makes more sense.

When I made the LAV III, I made the Command and Control variant with the blast shields so that was a conversion of the Stryker to the LAV III, then a conversion of the LAV III to the LAV III C&C and then a final conversion to the version with the blast shields. So it was triple conversion. Believe me, I'm speaking from experience here.

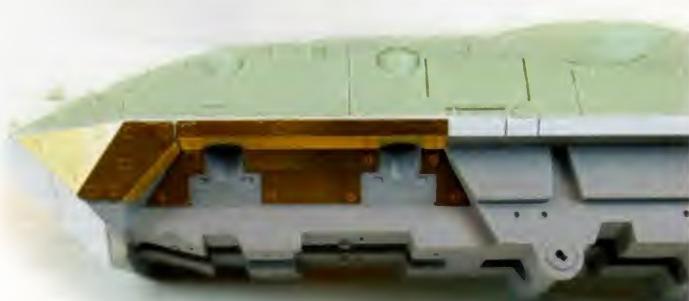
The net result is that you really have to study the multiple sets of ▶



The front lower hull plates were made using the photo-etched parts as templates.



The lower hull armour plates were extended back to the armoured boxes, which must be installed first to make sure there's no interference.



The photo-etched parts are now overlaid onto the plastic plates. These are from the blast shields photo-etch set and replace parts in the earlier photo-etch sets.



It is best to install the suspension before the rear lower armour since it covers the two rear struts.



I didn't use the photo-etched parts for the front armour but they did provide a locating guide for the washers and hex bolts.

Trumpeter 1:35 USMC LAV-25 'Piranha' • Kit No. 00349



I made washers out of Imm plastic to shift the wheels outboard so they wouldn't touch the suspension.

**"I glued all of the wheels in place and, as expected, they didn't all touch the ground...,"**

By rubbing the assembled wheels on a flat sheet of sand paper, I was able to get all 8 of them to touch the ground.



► instructions carefully and come up with an overall gameplan before getting started. But don't worry, it's actually easier than it sounds.

#### CONSTRUCTION BEGINS

The first decision is which LAV kit to use for a donor. The LAV-25 is cheaper, but the advantage of the ASLAV-25 is that you can avoid making some complex parts out of bent wire. The Coyote has three turret baskets and the Real Model conversion provides photo-etch for these but you must bend wire to make the basic frame. I'll cover this in more detail later but suffice it to say, it can be a bit complex. If you use the ASLAV-25 kit, you can use the plastic turret baskets along with the photo-etch

Trumpeter provides and adapt the Real Models photo-etch. No doubt it's easier.

Also, the Coyote has a unique set of guards for the headlights. These too must be formed out of bent wire and again I'll cover this in more depth later. But the ASLAV-25 light guards, while not the same, are similar and if you can live with a little less accuracy, then you can cheat and use these.

So the ASLAV-25 is a better donor kit if you are a modeler that doesn't want to deal with making parts out of bent wire. Otherwise, save some money and go with the LAV-25. I ended up using the LAV-25 mainly because I had one in my stash.

The first step is to mate the

new upper and rear hull parts to the Trumpeter lower hull. The fit is pretty good since these parts were derived from the Trumpeter LAV parts. Even so, there is still a bit of putty work to get everything closed up. There are also two large boxes that are mounted on the back of the lower hull behind the rear wheels. These are best installed at this time to facilitate the next steps. With the main body assembled, the next job, and it's a big one, is to mount all of the lower hull add-on armour plates.

Real Model provides these armour plates as photo-etched parts with instructions to make a 0.5mm spacer of the same dimensions out of styrene. Be aware, this is one of those steps

where the instructions for the uparmoured version with the blast shields supersedes the earlier instructions. When I considered these steps, it seemed to me that using the photo-etch really wasn't necessary except in a couple places. So mostly I used the photo-etched parts as templates for the plastic and then just used the plastic parts I made on the lower hull.

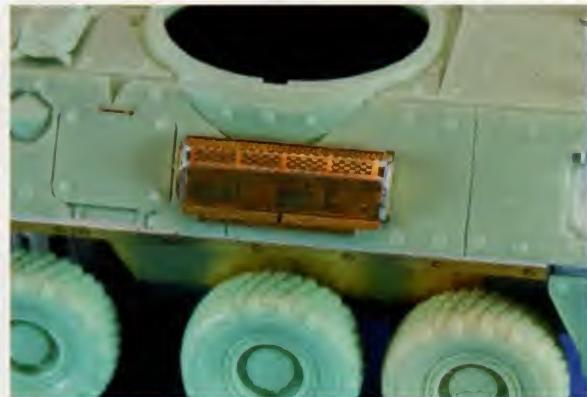
Extending down behind the front two pair of wheels is even more armour for the version with the blast shield. This too is in photo-etch and there is no styrene spacer required so I used the parts directly. In order to get everything lined up and matching, I then used the photo-etch that runs up to the



The Rear Left Electrical Panel was opened up to allow the connector cable to the MSTAR radar to be attached later.



The light guards are mostly formed out of bent wire. This is the hardest part of the entire model.



The left stowage bin also has a bent wire frame but you can use the photo-etched parts as a template making the job much easier.



The rear hull blast shield is a complex photo-etch assembly but thankfully, everything fits well together.



There are only a few additional details on the rear hull but I did add a small electrical cable running down from the antenna on the blast shield.

outer parts of the lower hull in these areas.

There is also supplemental armour that covers the area behind the rear two pair of wheels but its best to install the suspension first since the armour covers the struts for the rear two sets of wheels. The Trumpeter suspension is very well done and other than some mold seam clean up, little else is required. Too bad most it will not be visible once the model is mounted on a base.

With the suspension in place, I added the armour covering the rear struts and began adding the details to the armour plates. Mostly this is the seemingly endless number of hex bolt heads with a washer beneath them. These are provided in photo-etch and you have little choice but to be patient and get through putting them on all the plates. For the nose armour plates that were still in styrene I used the photo-etched parts as a guide for locating the bolt heads and washers as well as the photo-etch covers that go right on the front of the hull.

### WHEELS

With the suspension and lower armour in place I turned to the wheels. Real Model provides a very nice set of resin replacement wheels with the wider style tyres. These have nice bulges and a flat spot on the bottom to give the wheel a nice sense of weight. But there is a small problem. These wheels are developed from the Trumpeter add-on set and both have a problem with the rear tyres actually hitting the suspension on the inside. It's a noticeable and obviously incorrect. I am not sure of the exact nature of the problem but fortunately, the fix is pretty easy. I made a set of 1mm washers to offset the wheels enough to get the proper clearance. These parts are nearly invisible so it isn't necessary to make them perfectly and that saves a lot of time.

Then I glued all of the wheels in place and as expected, they didn't all touch the ground. Trust me, I've built a lot of wheeled vehicles and you will almost never get them all on the ground at first so I have come up with a simple trick that makes fixing this really easy. I just



The spare tyre is mounted to a resin bracket. Operation photo show a number of straps are also used to help it remain in place.

place the model on a fresh sheet of 220 grit sandpaper on a flat surface. Then I rub the model back and forth, left to right, and at an angle with just a little pressure. I do this repeatedly for about 10 minutes and eventually the sand paper wears all of the wheels down to where they all touch. The key is to not press too hard or else the suspension will flex and when you let go you'll still have wheels off the ground. But in all honesty, if you're going to mount the vehicle on a dirt/sand base then you can blow off this step entirely since the groundwork will hide this problem.

Converting the Coyote to the 'Battle Group Surveillance Suite' variant

Earlier I mentioned that I was going to convert the basic Coyote to the 'Battle Group Surveillance Suite' variant. But the truth is I didn't decide I was going to make this change until this point in the build. Not the best timing but still possible.

Thankfully, the change to the vehicle is pretty simple. There's an access panel on the back left side of the hull that needs to be opened

up. This is where the connection cable to the MSTAR is attached. I carefully chiseled away the cover and then opened a hole using a motor tool. I made a plug out of sheet plastic that I was able to slide into the right position. After a little putty I then made the couple small details and the hole where the connector will later be attached. Turned out to be pretty simple.

### HULL DETAILS

With the conversion work completed, I turned to adding the rest of the details on the hull.

There are a few resin parts but mostly it's a lot of photo-etch and a couple of parts you must make out of bent wire. I decided to make these first since they are complex and I didn't want to risk knocking off the photo-etch in the process.

The most complex parts to be made are the headlight guards. Real Model provides the rear view mirrors in resin and a few photo-etched brackets but most of the work is bending wire to make the frames. There are no templates so you really have to experiment. ▶



The remaining details on the left side are a couple of simple photo-etch brackets.



The right side details are bit more complex, especially the tow brackets behind the muffler.



The turret is a single, complex casting that is very well done.



The turret baskets must be built up from wire and the photo-etch included in the kit.

I won't lie, this is tough. One big help is that I used aluminum wire instead of brass. It is much softer and you can safely cut it with sprue cutters. You can also sand it and that was a very big help in getting the ends to have the correct angle to the hull. All said and done, it took me about three attempts per piece. Once I had everything in place, I added a few bolt heads I made from a punch and die. As I noted earlier in this article, if you start with the ASLAV-25 kit as a donor, you can cheat and use the light guards in the kit. They are not quite the same configuration but if you add some cable and razor wire hanging off them, it will be pretty tough to tell. So if this work looks too daunting, go that route.

The other hull part that has to be made using bent wire is the left side stowage bin. This isn't nearly as hard since the wire frame fits inside the photo-etch mesh and you can use the photo-etch as a template. But I did it next to get it out the way.

With these projects completed, the rest of the hull details are mostly photo-etch assemblies. Be prepared for some 'modeler's origami' as a lot of these parts require quite a bit of folding. But I've got to hand it to Real Model and Eduard, they've really done a superb job in providing the proper bend lines on the parts and making instructions that clearly show where to make the folds.

I started with the biggest assembly - the rear hull blast shield. It only protects the right side upper hull hatch and my best guess is that the left hatch isn't used by the troops. In the Coyote variant with the telescoping mast, it is attached through the left hatch so I'm guessing that there is a lot of equipment in that area and therefore the troops don't open it for their use.

The shield is a series of parts that must be folded and then

assembled. I've found that sanding the surface of the parts greatly increases the strength of the CA glue bond and the resulting assembly is pretty strong. I did have to putty and sand along a few joints since photos of the real parts show them to be one big assembly. In addition to the photo-etch, there are a couple bolt heads that must be made using a punch and die. This is a precursor to the turret work that has a ton of these little bolt heads. So if you don't have a punch and die, borrow one. The small resin antenna is included in the kit and I ran a tiny bit of solder wire from it into the rear taillight housing based on the reference photos.

Next I turned to mounting the spare tyre that sits on a large bracket on the front armour. The resin pieces in the kit are very nice but there is a pour block mark on the bottom of the spare tyre. The result is a spot where there is no tread. It's pretty hard to see once installed but I ended up using a hobby knife to carve the tread pattern back into the tyre just to be sure. The tyre frame has two large bolts and after the tyre is placed on them, there is a plate that locks the tyre in place. You have to make that plate and the hex bolts out of sheet plastic. It seems that the tyre can be held securely with just this arrangement but in the operational photos I have, there are almost a set of straps around the tyre as well. These look cool so I made them out of lead foil. It's a tough job but the result is really worth it.

Now I turned to the rest of the hull details. On the left side, there are only a few more photo-etch brackets and they assemble quite easily. The right side details are a bit more complex. The exhaust muffler is a resin

part and there are several photo-etched parts that are fitted around it. Some trimming of the photo-etch is needed to get everything lined up and straight. Behind the muffled are two rather complex brackets. These involve folding a number of parts and some very careful glue work. Patience, patience, patience. But once their done, they look really cool! Too bad most of these will not be visible once I load up the stowage.

So that wraps up the basic hull assembly, now on to the turret.

#### TURRET ASSEMBLY

Real Model provides a complete replacement turret. It is impressive that the main shell is a single, complex part. About all you have to do is remove the pour block and do a tiny amount of clean up. One note though. The instructions for the blast shields indicate that you are to remove the top armour on the turret roof behind the hatches. But Real Model has now done that in the casting so the instructions are out of date. Don't try to remove more!

The real challenge is making the three stowage baskets. The frames must be made up from bent wire and then detailed using the

photo-etch that comes with the kit. The instructions would indicate that you are to bend wire to the correct shape and then mount the three frames for each basket to the photo-etch side brackets. The idea is to build the baskets as a standalone assembly and then attach them to the turret. There is a whole myriad of problems with trying to do this. Not the least of which is that even if you can get everything bent and assembled perfectly, unless you can solder, the assembly will be very fragile. Plus, you've got to be incredibly careful so the baskets attach to the turret at the proper angle.

Fortunately, there is a much easier way to do this. Instead of building up the baskets as separate assemblies, I built them straight onto the turret. Here's how. First, I used the photo-etch mesh for the bottom of the basket as a template to bend the aluminum wire to the correct shape. This way I knew that when I attached the photo-etch later it would fit correctly. Real Model provides a jig for bending the rear basket frames but I could never get it to work. The photo-etched parts work much better. But I left the length of the wire on the sides longer by about 2mm.



The blast shields are photo-etched parts but be prepared to make a lot of small bolt and bolt heads with a punch and die!

Then I used the photo-etch mesh parts to make two marks on the turret where each wire frame should meet the turret side. I then marked where the middle and top frame would meet the turret. For the side baskets this just straight up the turret and for the rear one, it follows the shape of the rear plate. I determined the height between the top frame and the bottom one by measuring the height of the photo-etch side bracket parts. That way they too will fit correctly when I install them later. The middle frame is mid way between the top and bottom frame.

Then I drilled holes deep into the turret. I was able to mount the lower frames into the holes and adjust their position so they protruded just the right amount for the photo-etch mesh bottoms to fit on the frame and against the turret.

For the side baskets, the middle and top frames are made the same way since they have the same shape as the bottom one. Just leave the sides longer and when they are installed, make sure the outer frames are all vertically stacked.

The rear basket is harder since the middle and top frames have different shapes to account for the taper in the basket sides. It's really a trial and error process that took me a couple attempts per frame. But once I got it everything lined up nicely and, most importantly, the baskets are very strong. With the frames in place, I then added the lower and side mesh along with the side plates and support braces. But I left off the small tie downs that run along the top frame until later since those are quite fragile.

If all of this seems too complex, use the ASLAV-25 that has these baskets molded in plastic. You can combine the photo-etch provided by Trumpeter with the Real Model parts to get a good representation.

The next step is to mount the blast shields. These are nice photo-etched parts but you have to fiddle with the bend angles to get them into the right position and also to sit flat on the turret. Then it is time to get your money's worth from your punch and die set. There are six windows on the shields and each window has 9 small bolts that protrude inward and 9 hex bolt heads on the window frame which is a separate part. So that is 18 hex and bolts per window for a total of 108! Plus there are a good 30 more on other parts of the turret. Patience.

With the shields in place, I added the remaining turret details. There is a sensor mast mounted on the center rear of the turret. It's a complex photo-etch set of parts but I found that it is surprisingly

easy to make. The machine gun is much the same with a resin gun and support and photo-etch for the rest. The result is a highly detailed assembly which is important since it sits right on the top of the turret thus making it one of the most visible items on the Coyote.

Another great inclusion is the 'T' antenna which is now being used extensively on Canadian vehicles. On the Coyote, this is seen mounted on the right, rear antenna position that is just inside the rear stowage basket. This too is a nice combination of photo-etched parts and resin antennas. I used some solder wire and lead foil to add the cables running down from the antennas to the turret. Also, I added a small extension to the base made from plastic rod. This was to elevate the antenna to the correct height relative to the sensor mast based on the reference photos.

I finished the turret assembly by adding the very nice metal barrel, which is from The Barrel Depot and is included in the kit. There are also the smoke dischargers and few remaining photo-etch items and then the turret was done.

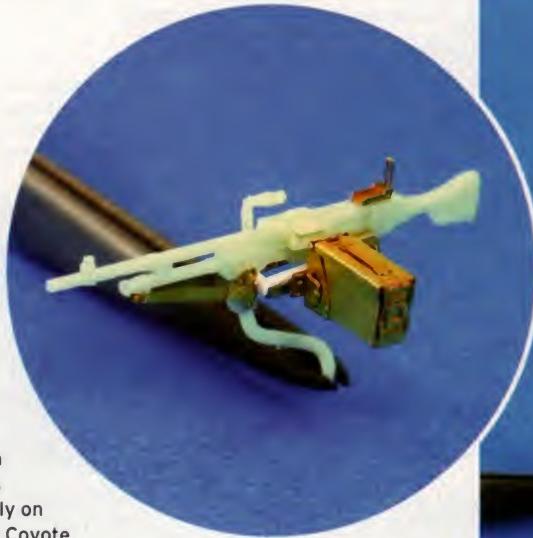
#### STOWAGE

The Coyote is loaded with stowage. This is great since it is painted in overall green (or tan) so the stowage presents an opportunity to add color in addition to giving the vehicle a 'lived in' look.

On the turret I added a pair of ammo cans to the outside of the side baskets. The references show that these are usually tack welded to the support rails but some also have a strap around them so I added that as well. With these parts in place I finally added the small tie downs to the top of the basket rails. These pretty well cover the rail tops but the instructions indicate which set of photo-etch to add to each piece.

Later I will fill the baskets with small items like water cans, etc but I'm going to leave them loose for painting so I can be sure to paint inside the baskets. I also plan to add a cooler and some water bottle boxes but those are also best added after the painting is done.

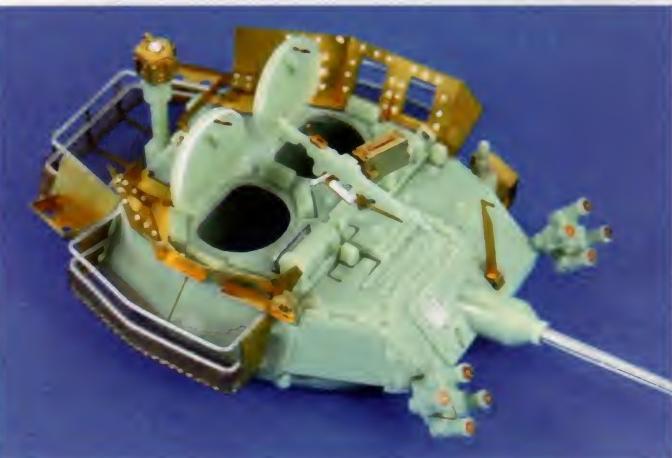
On the hull I started by adding a tow cable looped around the front left headlight guard. I saw this in a photo and the cable ends are locked in place with a set of clevis hooked to the guard and the eyelet in that area. The rest of the cable is held down by straps that I made from lead foil. Unfortunately ▶



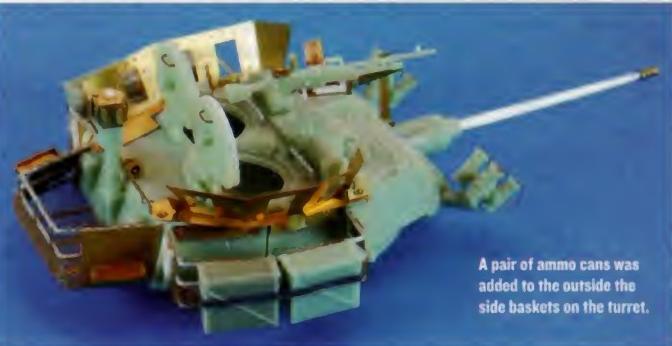
The machine gun is an impressive combination of resin and photo-etched parts.



The 'T' antenna is commonly used on Canadian vehicles. It is a nice photo-etch set with resin antennas and solder wire cables.



The finished turret including the metal barrel from The Barrel Depot



A pair of ammo cans was added to the outside the side baskets on the turret.



The tow cable is a from a Sherman tank and is held in place with strips of lead foil.

Trumpeter 1:35 USMC LAV-25 'Piranha' • Kit No. 00349



Looped razor wire was made from an Eduard photo-etch set and secured with lead foil.



The stowage packs are from the Real Model set.



Foldable cots add a little 'life' to the vehicle and the large pack comes from the Real Model stowage set.

neither the Trumpeter kit nor the Real Model conversion comes with a tow cable so I ended using a Sherman tank cable from Formations. It seemed close in shape and size.

Like the cable on hanging on the left light guard, I added a spool of razor wire hanging on the right light guard. The razor wire is a very easy to use set from Eduard and it too is held in place with straps from lead foil.

I then proceeded to add some additional stowage that I can paint in place. I'll add more items after painting but these are actually easier to install first. On the left side of the hull I added a small pack just behind the light guard, a pack resting on the center stowage bin and a couple of water cans in the rear rack. All of these are held in place with lead foil straps (and a little CA glue). On the right side I used a large pack for the back rack and a stack of cots in the center rack based on reference photos. Finally, I made a set of tow bars to strap to the front upper hull. These started out as resin copies of the ones in the Italeri M32 Tank Recovery Vehicle kit. I then modified them a bit to look like the ones in the reference photos and again secured them with lead foil straps.

#### FIGURES

The figures are a set from Real Model as well. As far as I know they are the only modern Canadian figures available on the market right now. I added some photo-etch microphones from a Royal Models set. One really great reason to add figures is that their uniforms are a tan based camouflage so they too provide a nice color contrast to the vehicle's green paint.

#### MSTAR RADAR

As I mentioned earlier, I decided to add the MSTAR radar mounted on a tripod. When deployed this is attached to the vehicle via an electrical cable that connects to the access panel I made on the rear left of the hull. The connection is a large item that I had to scratch build.

Mostly it's just bent wire and some plastic rod. But the main section has 'asterisk' cross-section that really left me puzzled as to how to make it. What I ended up doing was to take a plastic rod of smaller diameter and glue a number of strips of plastic on edge the length of the rod. Then I filled in the area between them using white glue since I knew it would shrink when it dried leaving the curved shape I wanted. I repeated this three times until I had the

right curvature. Once it dried I used a moist tissue to lightly smooth the surface and I ended up with the shape I wanted.

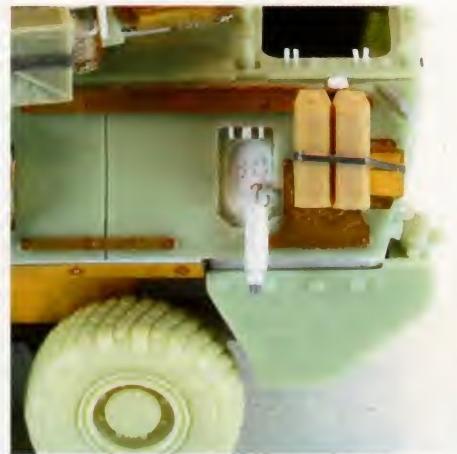
The MSTAR Radar itself is from Accurate Armour. It comes from their Warrior OPV conversion set and they were nice enough to sell me just the parts I needed. I scratch built the tripod out of plastic tubing and sheet plus aluminum rod for support.

#### BASIC PAINTING

The Coyote is pretty easy to paint since it's solid green. They are also painted tan in Afghanistan but I think the green looks more interesting with the sand type weathering so that's what I'm going with. I started out by painting the tyres in Testor's Model Master Acrylic US Army Helo Drab which is a dark grey that I think looks a lot like old, dirty rubber. I painted the rest of the model in Model Master Enamel Flat Black. This was followed by panel fading first with Model Master Enamel Olive Drab and then lightly with Model Master Enamel Faded Olive Drab.



The figures are a set from Real Model with photo-etch microphones from Royal Models.



The electrical connector was scratch built from wire and plastic rod.



The MSTAR Radar is from Accurate Armour and the tripod is scratch built.



Basic painting was done using the panel fading method starting with a base of flat black followed by panel fades of Olive Drab and Faded Olive Drab.



Markings are pretty limited and the model was dry brushed using Afrika Dunkelgrau.



The model was given a wash using thinned Raw Umber oil paint and then 'dusted' using Tamiya Buff and Deck Tan.



The details were painted by brush and the ice chest and 'T' antenna painted separately.



MIG Pigments were used on the tyres and wheel well.

At this point, the model looks notably more washed out than the photos of a clean Coyote which is intentional since it helps make the weathering easier. When I look at the photos of the Coyotes in Afghanistan, they look very washed out due to the dust accumulation. So that's why I went with these colors.

I then dry brushed the model with Testor's Model Master Enamel Afrika Dunkelgrau which is a tan/grey color. Lastly, I touched up the grey on the tyres with a brush and gave the model a heavy flat coat.

#### **MARKINGS AND DETAIL PAINTING**

There really aren't many markings on the Coyote. Based on the photos I had, I added an upside down 'V' on the left side hull hatch and also the rear hull. I also placed two small Canadian Maple Leafs on the turret and that was it.

The bulk of the detail painting is the stowage and the straps. The ammo cans on the turret were

painted in Model Master Green Drab and then drybrushed. I added some additional decals from an old Tamiya set and the Echelon 'Mean' Jerry Can set.

The tarps and personal cot canvas was painted in Model Master Enamel Afrika Khaki Braun and dry brushed with a lightened version of Model Master Enamel Afrika Dunkelgrau. I painted the straps with Model Master Enamel Afrika Dunkelgrau.

The turret machine gun was painted in Model Master Metalizer Gun Metal and dry brushed with Model Master Metalizer Dark Anodonic Grey. Separately I painted the 'T' antenna in Model Master US Army/Marines Sand based on the reference photos and glued it in place. Finally, I also separately painted an ice chest in red and white and placed it in the rear stowage bin. That's an easy way to add a bit of color.

Right now the model has a pretty high contrast that looks

overdone. But that's by design. After the washing and dusting, it will fade a lot so I wanted to start with a good amount of contrast so it wouldn't all wash out as I progressed with the weathering.

#### **OIL WASHING AND DUSTING**

I gave the whole model a wash using thinned Raw Umber oil paint from Windsor Newton. I like to thin it with Mona Lisa Odorless Paint Thinner (available at art supply stores) because it is a very weak thinner that won't attack the primary paint but is strong enough to dilute the oil paint. I use a dilution ratio of about 20% paint to 80% thinner.

The biggest effect of this is that the model is now not nearly as high in contrast as the effect of the wash is to blend the colors together and give a more integrated look. I also made sure to let it accumulate a bit in the corners and cracks to bring out the details.

Once dry, I began 'dusting' the

model. The photos of the Coyotes in Afghanistan show them to be very covered in dust and I really wanted to simulate this. But I didn't want to go too heavy with pigments since that can fade out the details I've worked so hard to add.

Instead I accomplished most of the dusting by using successive layers of thinned Tamiya Buff. I built this up on the bottom of the hull and then faired it up along the hull sides. This process was then repeated using Tamiya Deck Tan which is a lighter tan. But I didn't fair this color as high up along the model. The idea was to have gradual change in overall colors.

But the one area I don't use this method for is the tyres. These are better handled with pigments so once all of this work was completed, I repainted the tyres by brush, again using US Army Helo Drab. Then I applied liberal amounts of pigments to the tyres and wheel wells. The pigments are a mixture of MIG Pigments ▶



The stowage boxes come with the conversion kit and really add color.



The upside down water bottles are used for holding a glow stick that can only be seen through Night Vision Goggles.



The figures were painted based on reference photos and make a nice color offset to the green vehicle.



Trumpeter 1:35 USMC LAV-25 'Piranha' • Kit No. 00349



The last step was to make a simple base using sand from the beach and rock made from Plaster of Paris poured into Rubber Molds.



The MSTAR Radar was placed on the base with the vehicle.

◀ Light Dust and Dry Mud. I used my thumb to rub off most of what I applied giving a look of dust build up in these areas.

#### MORE STOWAGE

Also included in the Coyote conversion set from Real Models are several excellent printed sheets with boxes and signs for use in Afghanistan. These are a great addition to this model since they add a lot of color and really complete the look of the vehicle in operational use. I ended up using a small 'Stay Back' sign that I hung off the rear turret basket along with a Coca Cola and Water Bottle box that are strapped to the turret water can holders. In addition, I dropped on a couple of rations boxes behind the turret hatches and two more water bottle boxes strapped to a rack on the hull. Now the model is just bursting with color!

Finally, I added the upside water bottles to the front antenna. These are used for holding a

special type of glow stick that can only be seen through Night Vision Goggles so friendly forces can identify each other.

#### FIGURE PAINTING

The figures were first painted in a lightened version of Model Master Enamel Afrika Dunklgau and then added the mottling using Model Master Enamel Afrika Dunklgau. I used Model Master Enamel Italian Dark Brown for the small 'wiggles' to complete the camo.

The skin is painted in Model Master Enamel Wood and dry brushed using Model Master Enamel Tan. After a flat coat, the figures were given a light wash using thinned Windsor Newton Raw Umber oil paint.

#### GROUNDWORK

I decided to keep the groundwork simple since there is so much going on with the vehicle. The base itself is just a piece

of 3mm sheet plastic cut to size. The rocks are made from Plaster of Paris poured into rubber molds from Woodland Scenics and then painted and weathered. Finally, I made the sand using ... sand. I got it from the local beach and mixed it with a wall repair product call 'Presto Patch', some white glue and water and then spread it on the sheet plastic. Once dry I added some of the same pigments I used on the model and also a light wash to accent to the tire tracks.

#### CONCLUSION

Wow, what a big project, but it was so much fun. Obviously this is a complex build but it is not all that difficult. The eventual reward is a model with a ton of stuff going and all kinds of interesting details. ■



Real Models' 1:35 scale Coyote conversion is a lot of work but well worth the result for this unique vehicle.

## Modelspec

1:35 Real Model Canadian Coyote 2008 with Blast Shield  
Kit No.35137  
1:35 Trumpeter USMC LAV-25 'Piranha' Kit No. 00349

#### Materials

Real Model Conversion - Green coloured resin, photo-etch, metal barrel, Trumpeter Donor Kit - Injection molded grey coloured polystyrene, photo-etch, vinyl wheels waterslide decals.

#### Paints used

Testors Model Master Enamels 1749 Flat Black, 2050 Olive Drab, 2051 Faded Olive Drab, 2103 Afrika Dunkelgau.

#### Accessories Used

Real Model Small Stowage Set for LAVIII (35194). Formations US Cables and Clamps (F013).

#### References

LAV & Piranha, published by Concord Publications Company, ISBN 962-361-167-6  
Walk Around photos from the Prime Portal website - [http://www.primeportal.net/whats\\_new.htm](http://www.primeportal.net/whats_new.htm)  
Photos supplied by Real Model and planned for use in an upcoming book on the Coyote.

- Authentic and very complete conversion of Trumpeter's kit.
- Some tricky bending for light guards; care and time is required due to the multi-layered conversion and instructions.

#### Available from

Trumpeter is distributed in the UK by Pocketbond Ltd.

#### Rating



# AMPS 2010

**Scott Taylor reports on this year's big AMPS International Convention, now relocated to the National Military History Center in Auburn, Indiana.**



Mark Corbett's award-winning 1/35 M1059 smoke generator version of the M113 APC in 1/35 scale represented a vehicle he served on at Fort Carson, Colorado back in the 1980s. This model won Best US Vehicle, Best US Army Vehicle (presented by the US Army's TACOM), the show's theme award (Bought and Forgot) and Judges' Best of Show.

The 2010 Armor Modeling and Preservation Society International Convention took place on the weekend of April 22-24, 2010 at the National Military History Center in Auburn, Indiana. This year's theme, "Bought and Forgot," was chosen to encourage modellers to pull models which may have languished in their stash for years (or decades!) and build them; any kit which was released prior to 2000 was eligible for the theme award.

The AMPS convention plays a critical role for the organization, according to AMPS 1st Vice-President Roy Chow. Since the organization's members are scattered all across the world, AMPS is primarily a "virtual" club. As the only opportunity for the AMPS members to come together, the show provides something of a rallying point for the organization; thus AMPS goes all out to provide the best speakers, get the best vendors, put together the best raffle table, and have plenty of opportunities for members to socialize. Since many people attending the show only see each other once a year, the show has something of a college reunion feel to it - the level of camaraderie amongst attendees is very high. Additionally, the show is a great opportunity for vendors and manufacturers to not only connect directly with their customers but

also network amongst themselves.

The venue for this show is just about ideal. Aside from a large, well-lit area for models and vendors, there are several museums located in the building, including the 150+ vehicles of the World War II Victory Museum and the horse-drawn carriages, vintage automobiles, race cars and celebrity cars in the Kruse Automotive and Carriage Museum. The Victory Museum is also home to the vast collection of drawings from the US Army's TACOM collection, which is administered by the Military Vehicle Preservation Association. Copies of these drawings were available for sale at the show.

The tables were packed almost to overflowing with both new and old kits, as well as some superb scratch built models. Tamiya's Matilda, Hobby Boss' AAVP-7A1, and Trumpeter's M1117 Guardian and B-4 203mm howitzers were among the newer 1/35 releases that were evident on display. Both 1/48 and 1/72 scale armour had strong presence on the tables, which was nice to see.

AMPS's competition is conducted with their open judging process, in which each model is judged individually against an established set of criteria by a team of four judges before being placed on the display tables. As well as potentially receiving a medal, each modeller also gets the



Auburn, Indiana holds a special place in American automotive history, and the Kruse Automotive and Carriage Museum, located in the same building as the Victory Museum, is one of several local museums that honours that heritage. This 1937 Cord 812, on display in the museum, was manufactured in Auburn.



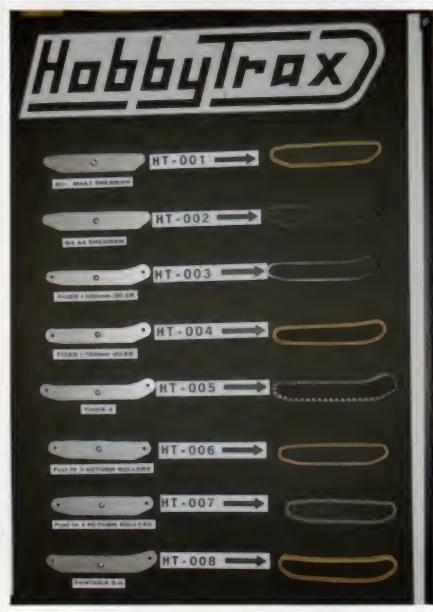
It's always a treat to go through the vendors' room at the AMPS convention. Hobbylink Japan, making its debut at the show this year, definitely travelled the farthest.



This superbly detailed and painted 1/35 IT-28 bridgelayer by Tony Zadro won the award for Best Russian/Soviet Vehicle.



AFV Club had a number of test shots on display at the show, including this buildup of their 1/35 15cm siG33 infantry gun.



This 1/48 Afrika Korps Sd.Kfz. 251 was built from the AFV Club kit.

HobbyTrax is a new company that debuted their product at the show. It consists of metal plates shaped like the track run for a specific vehicle, designed to shape vinyl tracks and act as a jig for assembly of individual link tracks to make them easier to install on a model.

scoring sheets that the judges used when examining the model, including written feedback. The AMPS system is thus designed not only to reward skill and effort but also to provide tools to help modellers understand their models' strengths and weaknesses and improve their work. One modeller told me, "three or four times a year I go back to my feedback sheets and read the comments check to see if I'm incorporating those into the model I'm working on."

The vendors' room is like a not-so-little slice of heaven for

armour modellers. Nobody's wallet emerges unscathed from there! Amongst other things, I picked up Swash's 1/35 SAS Jeep conversion from Hobbylink Japan - not cheap, but exquisite. There are bargains galore to be found, and many vendors have their latest and greatest items on display. AFV Club had sprues from their new Nashorn on display, as well as the mine plow from the M1132 Stryker ESV variant, US 105mm ammunition, and a cute little EOD robot. It was confirmed that the 40mm Bofors will still be released

by AFV Club, and there are some other very interesting projects in development. Joe Bakanovic had some of the last of the Tiger Model Designs kits and conversions on sale, and also news that he will be returning to the field soon under the Tigermodels.com banner, selling high-end "boutique" items through direct sale only. Among the models to be released (all in 1/35) are the much-requested Flak FAMO (a full 88 is included; only a Tamiya FAMO will be needed to complete the model), full kits of the M31 and M32 recovery vehicles,

more versions of the Bergepanther, more T-34 full kits, and more. At the Tank Workshop table, Jay Galbriez was proudly showing off the 1/35 Churchill CIRD conversion, and announced that he had acquired virtually the entire line of Iron Division 1/48 products, both released and unreleased, and would be bringing these to market soon. Jose Rodriguez had his full line of products on display, including Tiger Productions and Tiger Werke 1/35 diorama accessories, HQ72 1/72 diorama accessories, and Minuteman Models figures and



Operation Spring Awakening by Andy Gulden, featuring the Neograde I/15 Panzer IV/70(V), won Best Diorama at the show.



Paul Gaertner's scratchbuilt M65 Atomic Cannon was huge even in 1/72 scale. This impressive model won Best 1/72 Model.



I:35 scale SAS Jeep with figures.



Several examples of the new Tamiya 1/35 Matilda were on the table, including this example in the distinctive camouflage used on Malta.



The judging teams at this year's show worked overtime, looking at over 600 models over the course of three days.



A nicely weathered example of AFV Club's I/35 Churchill Mark III AVRE, finished as a postwar British vehicle.



This I/35 M113 with supplemental armour made for a very attractive model.



Duncan Macintosh's heavily modified and intricately detailed I/35 CMP HUP was finished as a vehicle used by Canadian Broadcasting Corporation correspondents to cover the Italian campaign during World War II.



Jim Mesko's I/40 Honest John missile launcher was certainly in the spirit of the show's theme, "Bought and Forgo"; this Adams kit dates from 1958!



This is AFV Club's tiny I/35 EOD robot, defusing a roadside bomb in Iraq.



A number of AMPS chapters had club display tables this year. The Panzer Gnomes, from Oak Lawn, Illinois, made a large-scale Panther glaciis to house their display of I/35 Panthers from 2nd Company, 1st SS-Panzer Regiment during the Ardennes offensive.



Neil Stokes was at the Air Connection table signing copies of his massive new book on the KV tanks, which debuted at the show.



Sean Dunnage's heavily converted I/35 LRDG CMP truck won the Best Commonwealth Vehicle award.



side from working tirelessly to stock one of the biggest raffle tables I've ever seen, Mark Corbett also found time this year to build this year's Judges' Best of Show winner, a superbly painted and detailed I/35 M1059.

busts. Jose will be adding the former Iron Division 1/72 diorama accessories to his line soon. New World Miniatures had its 1/35 M1117 Guardian wheel set and several new figures in both 1/35 and 1/16 scale for sale, including a 1/35 SAS Jeep crew. Among the noteworthy books which premiered at the show were the huge KV technical history by Neil Stokes, which was available at Air Connection, and David Doyle's Visual History volume on Churchill gun tanks, published by Ampersand.

Aside from shopping, judging, and looking at models and museum exhibits, there were seminars run throughout Friday and Saturday to keep modellers busy. Among the presenters were Jim Mesko with a slide show on Vietnam Armour, Neil Stokes talking about KVs, Ron Volstad discussing his artwork, and Chun Hsu with photos of the US T28 super-heavy tank and an update on the Patton Museum's impending move from Fort Knox to Fort Benning, Georgia.

By any standards, this year's

AMPS convention was a huge success. Show chair Sean Lynch and his crew ran a very smooth show, especially considering how many models ended up on the tables. Unfortunately, the ash cloud from the Iceland volcano that wreaked havoc with European air travel forced a number of European modellers to cancel their trip to Auburn, but this year's show still shattered previous records for AMPS conventions - some 634 models were entered and over 450 people attended.

The 2011 AMPS International Convention will be in the Fredericksburg Hospitality House in Fredericksburg, Virginia, just south of Washington, DC, from April 6-9, 2011. This venue is close to several good military museums, including the National Museum of the Marine Corps near Quantico and the Virginia Museum of Military Vehicles in Manassas, both of which will be offering special tours for AMPS convention attendees. For more information on AMPS and the show, visit [www.amps-armor.org](http://www.amps-armor.org)



The Editor tucks in to Tamiya's brand-new 1:48 scale Japanese Navy Komatsu G40 Bulldozer.

# PUSHING DIRT IN TINY TOWN

**A**t the beginning of the Pacific war, Japanese Imperial forces came across American bulldozers on captured airfields. Until this point, Japanese airfields had been built solely using manual labour, so the bulldozer was a revelation. The Imperial Japanese Navy placed an order for the industrial manufacturer Komatsu to produce a bulldozer in December 1942. Komatsu based their bulldozer design on the existing G40 farm tractor with the addition of a hydraulic dozer blade.

This first Japanese bulldozer was produced from January 1943 until the end of the war, and was used in the North and South Pacific. The G40 Bulldozer was also used extensively in the post-war reconstruction of Japan. Around 150 Komatsu G40 bulldozers were eventually built.

#### TAMIYA'S 1:48 SCALE G40 BULLDOZER IN THE BOX

I was surprised to see the announcement of a Komatsu G40 Bulldozer by Tamiya in 1:48 scale. It is an unusual subject, but

undoubtedly versatile as it may be used in military, airfield or even civil settings.

Tamiya's 1:48 scale Komatsu G40 Bulldozer is a compact model supplied in 53 parts on two grey plastic sprues. Moulding quality is excellent, with any ejector pin circles limited to areas where they will be hidden on the completed model. I was particularly impressed by the tracks and running gear, which are moulded quite convincingly as a single piece for each side.

In fact, engineering is cleverly

done overall. It is quite possible - even preferable - to build the model in sub-assemblies that may be painted and weathered prior to final construction.

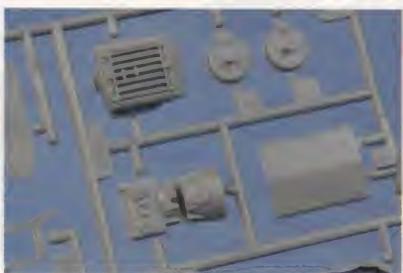
A small decal sheet plus a set of self-adhesive metal transfers are also included.

#### IDIOT PROOF... RIGHT?

If you are looking for a refreshing light sorbet after a heavy course of complex conversion or scratch building, Tamiya's 1:48 scale G40 Bulldozer will be just the ticket. I started cutting parts off the sprue



The tracks and running gear are cleverly moulded as a single part per side.



Moulding quality is perfect and detail is very good, as you would expect from a new Tamiya kit.



A seated driver figure is provided with the kit.



In addition to waterslide decals, Tamiya supplies self-adhesive metallic transfers.

while sitting in front of television at 8:30pm on a Friday night. By 11:00pm I had the model in sub-assemblies and ready for paint.

Having said that, I probably should have been paying a little more attention to the instructions and less to the television. At one point I rather carelessly managed to install the driver's seat facing backwards. I did not realise my mistake until I tried to fit the seat and rear mudguard assembly to the body of the tractor. Unless I was satisfied to keep this new configuration as a rear-gunner's position, I had to correct the problem. Unfortunately, the glue was thoroughly set, so I had to carefully slice off the armrests and rear cushion at the base of the parts, then re-attach them facing forward.

At the end of my evening of construction I was left with eight sub-assemblies – the main body, the dozer blade, two one-piece tracks and running gear, two sets of hydraulic arms and two side covers.

Overall fit of the parts was superb.

#### IT'S ALL IN THE PAINTING

After using the hairspray technique for the winter whitewash finish on my Zvezda ISU-152 last month, I wondered if the same method might be relevant ►



The model builds up quickly in sub-assemblies.

Fit is close to perfect for all parts.



I managed to glue the driver's seat facing backwards.

The glue was firmly set by the time I realised my mistake, so I cut the arms and backrest from the seat cushion.



Now nobody will ever know...



The sub-assemblies were temporarily attached to a small cardboard box to make handling easier during painting.



The model was built up into these eight sub-assemblies.



The parts were first coated with Tamiya's grey primer, straight from the can.

The next coat was a dark rust shade, mixed from Tamiya acrylic XF-10 Flat Brown and XF-1 Flat Black.

for a rusty and heavily chipped bulldozer.

The theory behind the technique is that the hairspray acts as a temporary, water-soluble barrier between the base colour coat and the weathering coat. The application of water and scrubbing should reveal the base coat under a randomly distressed topcoat of weathering.

In this case, the base coat would be the rusty shade, with the camouflage colour painted over the top of a layer of hairspray. First, each of the sub-assemblies was sprayed with Tamiya's Grey Primer straight from the can.

All remaining paint was applied using my Testor Aztek A470 airbrush fitted with the fine tan-coloured tip.

I mixed a dark rust colour from equal portions of Tamiya Acrylic XF-10 Flat Brown and XF-1 Flat Black, which was sprayed over all the sub-assemblies except for the front of the dozer blade. The area surrounding the blade was masked off with Tamiya tape and 3M Frisket film, and sprayed with Tamiya TS-42 Light Gun Metal straight from the can.

Now it was time for the hairspray. This was a different brand from the one I used on the ISU-152, but surely hairspray is hairspray, right? The components were given a generous coat of hairspray and allowed to dry for an hour or so.

Tamiya's instructions call out for XF-75 IJN Grey as the overall colour, but I did not have access to this paint. I used XF-54 Dark Sea Grey instead. Several very light dusting coats were sprayed until the grey shade completely covered the dark rusty brown. The only exceptions were the tracks and the front of the dozer blade. I selectively sprayed the wheels and running gear grey, but left the tracks in their original dark brown shade. I then loaded up the airbrush

with a thin mix of Tamiya XF-72 Brown (JGSDF), and sprayed this colour around the inside border of the tracks to represent dried dirt. The same colour was sprayed on the front of the dozer blade.

An hour or so after the paint was applied, an old soft toothbrush and a cut-down fine paintbrush were used to scrub some of the top coat of grey from the various sub-assemblies. The brushes were kept wet to control the amount of paint removed. Reference photos suggested that the side covers were particularly heavily weathered, so these were singled out for special treatment. I found that this time, the paint was much more easily scrubbed away than with the ISU-152. I am not sure if this was due to the different brand of hairspray, or if I applied a heavier coat. I will experiment more with the technique in future to find an answer to this question.

Scrubbing the brown paint off the front of the dozer blade revealed the shiny metal beneath – just the effect I was looking for.

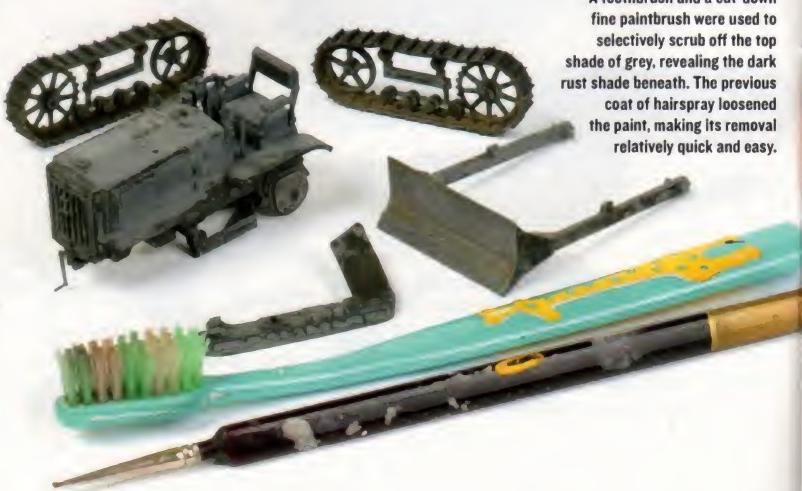
With the painting and basic weathering complete, it was time to pick out some of the details. The hydraulic lines, the seat and the armrests were all painted Tamiya XF-10 Flat Brown, applied with a fine brush. Tamiya Diorama Texture Paint – Soil Effect Dark Earth was brushed onto the lower surfaces and underneath the mudguards. The sub-assemblies were now glued together. Once again, fit was perfect. In fact, the fit of the dozer blade was so good that glue was not required.

Final weathering started with an overall brushed coat of Sin Industries Blue Filter for Panzer Grey. This helped reduce some of the harshness between the rust and the grey top colour. It also left a random deposit of blue pigment on the sides of the body. I quite liked this enigmatic effect, so I decided to leave it in place.

The rust and metal surfaces were sprayed with hairspray before any further painting. This acts as a soluble barrier between the colours above and below.



Tamiya XF-54 Dark Sea Grey was used as the top paint colour. The inside of the tracks and the dozer blade received a coat of XF-72 Brown (JGSDF).



A toothbrush and a cut-down fine paintbrush were used to selectively scrub off the top shade of grey, revealing the dark rust shade beneath. The previous coat of hairspray loosened the paint, making its removal relatively quick and easy.



The side surfaces received extra weathering attention.



Most of the weathering was completed prior to final assembly.



The soil coloured paint on the front of the dozer blade was also partially scrubbed off, this time to reveal the metallic colour of the blade beneath. The model is assembled here, and awaiting final weathering.



MiG Filter and Pastels were used for the final weathering of the body and the tracks.



The diminutive size of this model can be appreciated when it is compared to a common 2B pencil.



Mig Pigments were used to dust up the tracks, while tiny quantities of Mig Fresh Rust and Standard Rust pigments were mixed with Standard Rust Effects (a liquid) and applied very selectively around the vehicle. An additional slurry of MiG Pigments was brushed on to the front of the dozer blade, then mostly scrubbed off with a stiff brush when it had dried. The tip of a 2B pencil was run along the edges of some of the surfaces to add some highlights too.

The self-adhesive metal transfer of the IJN anchor was peeled from its backing sheet and carefully applied to the front of the radiator grille. A few anxious minutes were spent trying to jockey the tiny transfer into place with the tip of a hobby knife. Finally, a coat of Gunze Flat Clear was sprayed over the upper surfaces to blend the paintjob.

#### CONCLUSION

They don't come much easier than this.

Tamiya's 1:48 scale Komatsu G40 Bulldozer is a versatile subject and a very fast build. It will be suitable for military, airfield or civilian dioramas. The scale and the subject suggest that the kit should most obviously accompany an aircraft, but I think it looks interesting as a standalone model too.

The heavy wear and tear on these vehicles also makes Tamiya's G40 Bulldozer an ideal test bed for trying out new weathering techniques.

This is a well-detailed, cleverly engineered and fun little kit. ■

## Modelspec

**Tamiya 1:48 Japanese Navy Komatsu G40 Bulldozer**  
Kit No. 32565

### Tools and Materials Used

Testor Aztek A470 Airbrush with the fine tan-coloured tip, Revell Contacta Cement, Tamiya Extra Thin Liquid Cement.

### Paints

Tamiya Acrylic Paints: XF-1 Flat Black; XF-10 Flat Brown; XF-54 Dark Sea Grey; XF-72 Brown (JGSDF). Gunze H20 Flat Clear.

### Weathering Materials

Tamiya Diorama Texture Paint - Soil Effect Dark Earth. Mig Productions Pigments: Industrial City Dirt P039; Standard Rust P025; Fresh Rust P416. Mig Productions: Standard Rust Effects P411. Sin Industries (Mig) "The Filter": Blue Filter for Panzer Grey P240. Copperplate 2B Pencil. Clairol Professional Final Net Salon Hair Lacquer.

Clever engineering; versatile subject; excellent surface detail; perfect fit.

None worth mentioning.

### Available from

Tamiya is distributed in the UK by The Hobby Company Limited - [www.hobbyco.net](http://www.hobbyco.net)

**Rating** ●●●●●●●●○

Dragon continues their excellent 1:35 scale US WWII half-track family with the T19 105mm Howitzer Motor Carriage. Al Bowie takes a look.

# STOPGAP SPG

The backbone of the US Army's firepower in WWII was its artillery, which provided superb support to its other fighting arms. The US had the advantage of summing up the opposition and preparing before it mobilised and it became apparent to military planners that their Armoured Formations required highly mobile fire support. Obviously, fully tracked vehicles were preferred but the situation required the use of what was immediately available. As an interim measure, it was decided to marry the excellent M2A1 105mm Howitzer with the M3 half-track. The new vehicle designated as the Howitzer Motor Carriage T19. Modifications were made in the form of a reinforced chassis and redesigned mount plus the addition of a gun shield and production of 324 T19s was undertaken in early 1942.

The vehicle entered service in North Africa with US forces and served until replaced by the excellent M7 "Priest" SPG. They served only with the US forces and a few continued to serve through Sicily, Italy and into Southern France.

DML has expanded their excellent US half-track family, adding their superb M2A1 105mm howitzer to produce a T19 HMC. The kit is presented on nine sprues and totals 301 plastic parts, one turned aluminium barrel, a photo-etched fret plus two decal sheets. Not all of the parts are used and a number of parts will be left over for your spares box including jerry cans, Anti-Personnel Mines, a .50 Cal and pioneer tools. Most of the

sprues are from their earlier half-tracks and the M2A1 Howitzer kits are used however corrected cabin sides are supplied applicable to the HMC and GMC variants. It's a small thing but the screws on the hull sides are a different (very slightly but noticeable) sizes on each hull side. I doubt this will be noticeable when the parts are on opposite sides of the kit but I found it strange.

The kit has a good representation of the engine and gives the option of open or closed armoured radiator covers with the open ones done in PE. The lower chassis and running gear has excellent detail however it is not the correct reinforced version used on the T19. The AMS afflicted and accuracy obsessed may feel the need to correct this. There is no change to the excellent depiction of the running gear used in previous releases and the same can be said for the which shares the same virtues and faults as the original where the only real vice is the fact that the breech handle is moulded shut. The shield is new and beautifully moulded with no ejector pin marks in a scale thickness with excellent detail.

Stowage is provided in the form of the eight stowed 105mm rounds and little else. A well-detailed .30 cal is provided for the pedestal mount and a .50 cal is available as these were also fitted to vehicles in service and seem to be the norm (or none) for North Africa where the Allies did not have air superiority. The instructions are clear and easy to follow and I didn't find any of the traps that usually appear in DML instructions when the kit is based on a

previous release. Marking options are provided for 5 subjects and these are generally devoid of any interesting schemes being the regulation OD with White Stars and yellow serials, however some of the US flagged variants are covered for North Africa. Only one unit is identified in the markings and that is the example for 7 Regt Combat team, 3rd Inf Div in Morocco in 1942 with US flags and the Name "Evelyn". All of the remaining options have names these being; "Battering Ram", "Bill", "Alomosa" and "Cathy" I believe these are all stateside examples. A small and very useful generic sheet of US Alpha Numeric Stencilled for bumper codes is provided and Yellow Serials are provided in a way that a number of different examples could easily be done other than the supplied options.

This is an excellent kit of this stopgap SPG and is highly detailed throughout. DML has put a lot of thought into the engineering and ejector marks are limited to areas where you will not see them (if at all). This is state of the art in detail and apart from the reinforced frame/chassis not being depicted it matches references almost perfectly. A stunning model can be made from this and I highly recommend it. ■

Thanks to The Hobby Company Limited for the sample  
[www.hobbyco.net](http://www.hobbyco.net)

Markings are provided on two decal sheets.



Dragon supplies a lovely turned metal 105mm barrel with rifling inside the muzzle.



Photo-etched add even more detail to the T19.



The windscreen is moulded as a single part, incorporating the frame.



The drive sprockets are remarkable mouldings.



The front wheel arches are moulded as part of the front body.



The rear floor features anti-skid texture.



Seats have handholds moulded in place.



The tracks are cleverly presented as inner and outer halves.



The lower chassis and running gear has excellent detail however it is not the correct reinforced version used on the T19.



The cab and forward body are made up from multiple panels.

Thomas Morgan conducts some remarkable microsurgery on GreatWall's small but beautifully formed 1:35 scale BMW R75.

# WEHRMACHT ON THREE WHEELS

**T**he BMW R75 was a German WWII heavy motorcycle with the sidecar wheel connected by a fixed shaft to the rear wheel of the bike. This ad-hoc two-wheel drive improved off-road performance. The BMW R75 was closely based on the design of the Zündapp KS 750. In fact, the Wehrmacht ordered that the machines should be produced in parallel and also that a standardisation programme should take place. By the end of the war, 70% of parts were common

between the BMW and Zündapp motorcycles. Around 16,500 BMW R75s were manufactured before the factory was bombed to a standstill.

I usually build 1:48 scale WWI aircraft, but each detailed construction would take me a year or more to complete.

Recently I opted to try some armour kits, hoping to build something I could knock off more quickly. However I found I was still taking months to build and detail a tank. So maybe something really small would be faster - like a motorcycle. With this fatally

flawed concept in mind I purchased GreatWall Hobby's 1:35 BMW. And as I figured the sidecar couldn't possibly add more than a week to the build, I decided build it too. Wrong again.

The heavy BMW motorcycle is a great subject, and the kit is nicely crafted so I was surprised that so few builds of it had been posted or published.

I had planned to build this model straight from the box, but soon found myself detailing the beast. It was like constructing an inside-out WWI cockpit.

## UPGRADING THE BIKE

Both the bike and the sidecar were re-detailed with several components being scratch-built.

The first challenge I encountered was the split fuel tank. Each half of the tank is moulded as one piece with its half of the frame. And before they are joined, the engine must be assembled, painted and positioned between the halves. Therefore the tank and frame pieces must also be painted before they are joined. So then how do I clean up the joint down the middle of the tank?



The rear fender was extensively detailed. The cylinders were detailed separately to the rest of the engine.



The kit's frame components are finely moulded and only a little cleanup of the seams is required.

I chose to disregard the instructions and to modify the frame. I glued the tank together and smoothed the seam. I then removed the crossbar behind the driver's seat. I replaced this with a piece of .040" rod glued to the front of the back fender. I also omitted the kickstand. This allowed me to slide the painted engine - WITHOUT the cylinders - into the pre-painted frame. The cylinders were painted and added later.

I should note that the kit's frame components are finely moulded and only a little cleanup of the seams is required. This was made helped by cutting the sanding tapes of my Flexi-File into thin strips able to reach the smallest corners of the frame.

While dealing with the tank I thinned and re-contoured the edges of the large air filter cover. Using my hand tool, I turned a new fuel cap from aluminum rod.

The cylinders were detailed with new valve rods, spark plugs, air intakes, carburetors and exhaust

ports, using soft wire, plastic rod and brass tube. A tiny stopcock was scratched for the bottom of the tank.

The engine was coloured Alclad II Dark Aluminum, then buffed with 4B graphite.

Once the engine was in the frame I glued a heavy plastic rod into the bottom to use as a handle throughout the rest of the construction. I did the same for the sidecar.

In contrast to the frame, the exhaust system suffers from frustrating mold seams. I replaced all the piping with styrene rod. The various sleeves were made by "sprue stretching" different diameters of styrene tube.

Photos show a small box fixed to the right leg shield. I fabricated this from .003" aluminum sheet, cut from a disposable pie plate obtained at my grocery store.

Major surgery was required for the forks and triple tree. The latter was completely re-built as the model's simplified version was

the kit's only serious weakness. Styrene rod and aftermarket nuts in plastic, resin and brass were used.

Most museum specimens show corrugated rubber "boots" on the forks and this is how Great Wall provides them. However there were prominent staggered mould seams on one of my forks that were beyond my ability to repair. Fortunately, a review of period service photos showed most forks with smooth metal sheaths, not exposed boots. It looked like a simple fix. The spoiler was that the sheath is circular at the bottom end, but oval at the top where it joins the triple tree. Sections of styrene rod replaced the corrugations, and the sheath was contoured with several layers of Tamiya putty, carefully filing and sanding after each to assure the forks were symmetrical.

The handlebar grips are overly simplified and misshapen. The ends of the grips should be at right angles with handlebars. I corrected the erroneously angled inner ends

of the grips with styrene rings and putty, but I hadn't the courage to fix the outer ends. To be fair, the brake and clutch handles are excellent and needed only a little touch up after I damaged the ends of one. These were painted Alclad II Dark Aluminum and given a wash of Paines Grey oil.

The edges of the fenders were thinned to a scale thickness and Bronco wing nuts added where needed.

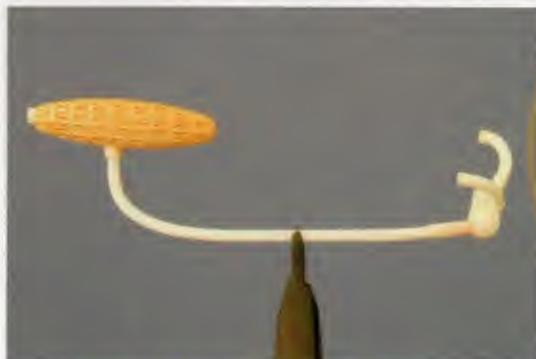
The frames and lift handles for the fenders are finely molded but fortunately Great Wall has used a very strong plastic. However assembling and aligning the multiple parts of each fender, particularly the front fender is taxing. I found the shallow locating pins ineffective. Instead I drilled out both the holes and the corresponding pins to .014" and substituted short lengths of plastic rod, which I trimmed to length after the glue had set. Not only did this keep all the pieces in position, but it generated much stronger joints. ▶



The sanding tapes of my Flexi-File were cut into thin strips in order to reach the smallest corners of the frame.



Once the engine was in the frame I glued a heavy plastic rod into the bottom to use as a handle throughout the rest of the construction.



In contrast to the frame, the exhaust system suffers from frustrating mold seams. I replaced all the piping with styrene rod.



The various sleeves were made by "sprue stretching" different diameters of styrene tube.



Photos show a small box fixed to the right leg shield. I fabricated this from .003" aluminum sheet, cut from a disposable pie plate obtained at my grocery store.

**► The kickstand is a complete fantasy.** I shaved the mounting lugs from the frame and fashioned a new U-shaped stand from styrene rod. It is anchored up behind the engine out of sight, so it didn't need any mounts.

I wasn't looking forward to fabricating a reflective rear-view mirror but, as very few operational photos show a mirror, I chose to omit it. This brings up a point: many period photos show BMWs in training units. They can be outfitted differently than bikes in actual service, so beware.

#### ALONG FOR THE RIDE

Detailing the sidecar was very enjoyable - "a hoot" as we say in Canada. I replaced the rear cargo hatch and added bolts by Calibre35. The tiny latch handles were made by holding a styrene rod close to a candle flame until a ball of melted plastic formed. Then using the smallest collet in my hand tool, I sanded it into a sphere.

The floor slats were shaved off and replaced with sections of basswood scale lumber from Kappler.

The loops for the canvas cover are brass wire. The ends were crimped flat and epoxied to the car.

The handrail was replaced with styrene rod, and the brackets for the gun rail built from .005" and .010" styrene.

The thin U-shaped bracket supporting the back of the fender is "sprue-stretched" styrene U-channel.

I replaced the two telescoping braces that attach the car to the bike with brass tube, styrene rod, and aftermarket nuts. I used the end brackets from the kit part.

The three stowage boxes are prominent features, especially on the sidecar. The kit's boxes are well sized and come with delicately moulded handles and PE clasps. However their carrier racks are too plain. I detailed them with plastic bits and brass wire. I also added

some copper wire and brass strip to the latches.

My "corrected" (?) racks slightly re-positioned the boxes, placing the sidecar's left box in conflict with the tow hook on the car's frame. I cut it off and repositioned it a couple of millimetres farther left.

Note that many museum vehicles sport flawed carrier racks - check your references.

#### SORTING THE ELECTRICS

The vehicle's wiring and control cables presented a challenge - not only in construction but also in solving the mysteries of purpose and position. The later was helped by reference to the instructions from an old ESCI Modellistica 1:9 scale BMW R75 kit. Biplane kits usually supply a "rigging" diagram, and such a wire & cable schematic form Great Wall would really help.

Most of the electrics are from Detail Master, who offer insulated wire as small as .0075" dia.. Positioning those tiny wires without kinking then was a real trial of patience.

I had trouble figuring how to simulate the various control cables. I settled on pale grey stretched sprue held in place with only spring tension, without the need of messy adhesive. The cable ends were inserted into small holes - and I mean small - .008" or .010". Mascot manufactures "flat pivot drills" as small as .004" and they are available from jewellers' supply houses. I use these in a homemade pin-vise, fabricated by drilling out the end of an Ultrabrush applicator.

I colored the cables brown with a Staedtler Lumocolor Permanent 317-7 marking pen.

The kit omitted the octopus-like fuse box under the driver's seat and I can understand why. It was an aggravation to position and wire.

Rather than fight with the mould seam on the battery bracket, I replaced it with .005" styrene.

The real treasure of this kit is





The sidecar's rear cargo hatch was replaced with styrene and detailed with resin bolts from Calibre 35.



Stowage boxes were detailed with plastic bits and brass wire. I also added some copper wire and brass strip to the latches.



Tiny holes for electrical wiring were drilled using this homemade pin-vise, fabricated by drilling out the end of an Ultrabrush applicator.

Great Wall's photo-etched wheel spokes. They are supplied as pre-formed shallow cones. Each wheel comprises two opposing PE cones sandwiched within a tire of five circular laminations. Be sure to stagger the two sets of spokes to achieve the most realistic effect.

The treads are too deep, so I filled them with a little thinned Tamiya putty. I also drilled holes for air valves, inserting short sections of chemically blackened brass wire.

In order to fit the axle pins of the front wheel into place, it is necessary to spread the forks, which risks rupturing all their joints. Therefore I drilled out the hub and secured the wheel with an axle rod that slid through the ends of the forks.

#### FINAL DETAILS

After painting the tires NATO Black, I masked them with Tamiya tape (cut with a compass cutter) and sprayed the spokes and hubs Dark Yellow. The bare metal hub of the front wheel is Alclad II Dark Aluminum. The tires received a wash of MIG Europe Dust in Tamiya thinner. Once dry, the sidewalls were dry-brushed with German Grey mixed with a little acrylic retardant.

The kit provided a nicely knobbled clear lens for the bike's rear fender. It was made reflective by polishing its back surface, and applying Tamiya Clear Red followed with a disc of aluminum foil.

The other lights and reflectors are modified clear or red M.V. Lens. These were epoxied to plastic rods, (CA won't adhere) turned to smaller diameters, thinned, re-polished with a 12000 sanding pad and coated with Future.

The headlight's pinions were moved back a couple of millimetres. The light's tiny switch was shaved off with a razor blade, painted and re-attached. The speedometer case was drilled out and replaced with a sleeve of black painted plastic tube.

A substitute for the kit's speedometer decal came from

Archer Transfer set AR35214. It was burnished to the end of a plastic rod, slid into the bezel tube and "glassed" with a few layers of Future.

The sidecar's seat was re-sculpted with a solid back, and the two bike seats were detailed with Calibre35 rivets. I also scratched a new mount for the passenger's seat, including a copper wire spring.

Although most museum specimens have black leatherwork, I chose the variation of Tamiya Red Brown with darker areas of Flat Brown, dry-brushed with Raw Sienna oil. A satin clear coat made them more leather-like. The empty passenger's seat is dustier than the driver's.

The rubber parts - the foot pegs and the kneepads - are NATO Black dry-brushed with Medium Blue. I couldn't adequately mask the knee pads on the fuel tank, so I was forced to saw them off flush with the tank, paint them and re-attach them. It would have been much easier if they had been supplied as separate pieces.

For the two knobs and linkages on the right side of the tank, the kit offers a choice of molded or PE parts. The former are too chunky and the latter too flat. Actually, the kit's instructions are weak in locating the placement of some of the PE. Good reference photos are a help.

The shift knobs are an easy replacement. Using my hand tool, I turned the end of a .040" styrene rod into a hemisphere. I drilled the end and inserted a .012" brass wire. I cut off the plastic rod, re-chucked the wire into the tool and finished the sphere.

The linkages were scratch built from fine plastic rod and bits of .005" sheet.

The jewel-like MG 42 is a resin offering from K59. I replaced the inner barrel with .5mm brass tube, chemically blackened.

I have yet to be satisfied with my colouring for guns. Here I tried Tamiya Sea Blue with a coating of Vallejo Model Air Satin. I followed this with a pin-wash of Paines Grey ▶

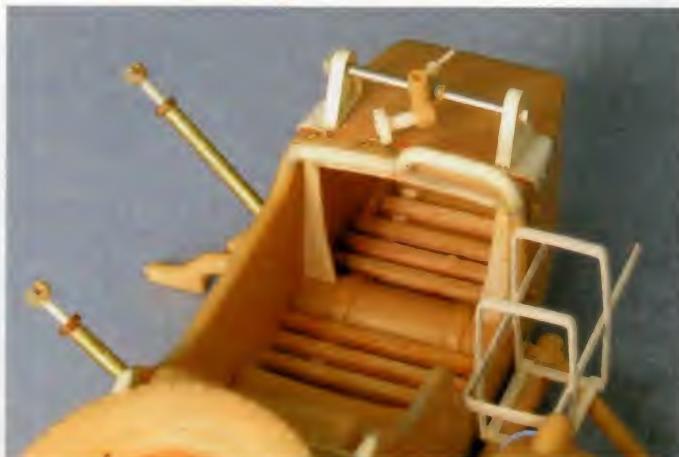
The real treasure of this kit is Great Wall's photo-etched wheel spokes. Each wheel comprises two opposing PE cones sandwiched within a tire of five circular laminations.



Shift knobs were replaced by turning the end of a .040" styrene rod into a hemisphere. I drilled the end and inserted a .012" brass wire. I cut off the plastic rod, re-chucked the wire into the tool and finished the sphere.



The heavy machine gun mount was replaced with a scratch built item.



The floor slats were shaved off and replaced with sections of basswood scale lumber from Kappler.



The sidecar ready for paint!

oil and a dry-brushing of Titanium White oil. I finished with a gentle buffing of 4B graphite. I think it's too dark, so next time I may start with a medium grey.

The carrying strap is foil, with PE buckles from an old ReHeat set.

The gun's mount and its rail were scratched. The ammo box is by Ultracast.

The jerry can is from Tasca's German Jerry Can Set B 35-002. These are very nicely moulded. I sprayed it Tamiya Neutral Grey, then post shaded with Dark Grey and highlighted with Light Grey. Subtle rusting was achieved with Burnt Sienna oil mixed with MIG Rust pigments.

Just as I was about to glue the can to its frame, I noticed the embossed "Wasser 20L" - I hadn't realized that the set contained both petrol and water cans. I sheepishly assembled and painted a "Kraftstoff 20L" version.

Note the red "high octane" badge on the handle (cut from foil) indicating the higher octane fuel used by motorcycles and Kettenkrads.

The frame's pad lock is from Verlinden's German WWII Vehicle Clasps set #2499.

### COLOUR ME YELLOW

According to H.P. Hommes the heavy BMWs and Zündapp bikes were factory finished in one of four colours: Dunkelgrau - dark grey (Army), Gelbbraun - grey brown (DAK), Dunkelgelb - dark yellow (Army) and Grau - grey (Luftwaffe). Relatively few appear to have been camouflaged in the field, possibly because a multi-coloured scheme would be ineffective on such a small vehicle.

After priming with Tamiya's Neutral Grey, I chose Dark Yellow for my Dunkelgelb. Some areas were highlighted with Buff. A coat of Vallejo Model Air Satin Varnish was followed with a pin-wash of Burnt Sienna oil.

Chipping was kept subtle, using a 3:1 mixture of Vallejo Cadmium Maroon and Coal Black applied with a fine foam sponge. Mixing in a little acrylic retardant helps keep the sponge from gumming up too quickly.

Rusting was also minimized, using Burnt Sienna oil mixed with MIG Rust pigments.

Worn areas were buffed with 4B graphite using a soft bristle brush in my hand tool.

An overall spray of Humbrol Matt

Cote (with all the lenses masked by Silly Putty) was followed by a liberal dusting of various MIG pigments.

For some visual interest I left the jerry can frame in red primer (a mixture of Red Brown and Buff) and painted one of the sidecar's boxes in a faded tri-colour camo, as if it had been taken from another bike. I also "aged" the spare tire with worn treads and a darker rusted hub.

The "Prinz Eugen" Division insignia are Archer dry transfers. Lightly slitting the carrier film allowed the transfer to be wrapped around the curved nose of the sidecar.

The kit's minute BMW logos and tire pressure stencils were applied over a local clear coat of Model Master Sealer for Metalizer. Placards on the fenders were taken from Archer's German Information Placards AR35215.

The kit's license plate decals were fine but I preferred those from Verlinden's vehicle registration set No.2519. After lightly sanding away the excess decal film, the plates' edges were shiny brass. Rather than attempt re-painting and risk ruining the decals, I applied a chemical "bluing agent" with a small brush. The decals were unharmed.

The Stahlhelme is a Tamiya spare, hollowed out and fitted with a liner cut from an Ultracast resin helmet. A metal foil strap was added, fitted with copper wire and spare photo-etched buckles. Period photos show that German riders rarely left their goggles on their helmets, rather they hung them around their necks.

I can't paint a figure to save my life but for size reference my bases always include a grey "mannequin" in the appropriate uniform. The rider was modified from a Dragon Feldgendarmerie set #6061. I moved the goggles from his head to his neck, shaved off his equipment straps and re-sculpted the hair and coat. I added .005" styrene belt,

with a buckle and epaulettes from Aber PE set #35A86.

The base was cut from a Reality in Scale plaster cobblestone road section, painted with Tamiya acrylics and dusted with MIG pigments. ■

### Modelspec

Lion Roar (now GreatWall Hobby) Motorcycle R75 with Sidecar Kit No.L3510

#### Materials Used

Aber German panzer troops accessories PE 35A86, Archer German information placards AR35215, Archer German instrument faces AR35214, Archer SS panzer division markings AR35090, Bronco wingnuts, Calibre 35 rivets, Detail Master wire, Dragon German Feldgendarmerie figure 6061, Kappler scale lumber, K59 MG 42, Lion Roar hex nuts, Master Club nuts & bolts, M.V. Lens lens, Reality in Scale cobblestone road section 35058, Tamiya German helmet, Tasca German jerrycan Set B 35-002, Ultracast German helmets AC35001, Ultracast MG 34/42 ammo boxes I35009, Verlinden German vehicle registration plates 2519, Verlinden German WWII vehicle clasps 2499

#### Paints Used

4B graphite, Alclad II Dark Aluminum, Humbrol Matt Cote, MIG pigments, Model Master Sealer for Metalizer, Staedtler Lumocolor Permanent marking pen 317, Tamiya acrylics, Vallejo Model Air Satin Varnish, Vallejo acrylics Cadmium Maroon, Coal Black, Winsor & Newton oils Burn Sienna, Paynes Grey, Titanium White.

#### References

Hommes, Hans-Peter, "Zündapp KS 750, BMW R 75", 1997, H.-P. Hommes, ISBN 9783000737175  
J. Piekalkiewicz, "BMW Motorcycles in World War II R12/R75"  
1991, Schiffer Publishing Ltd, West Chester, PA, ISBN 0-88740-306-9  
<http://www.toadmanstankpictures.com/bmr75.htm>  
<http://www.wehrmachtgespann.de>  
This site includes an illustrated parts list.  
ESCI Modellistica BMW R75 1/9 kit instructions

Intricate presentation of an interesting vehicle; fine yet strong frame; pre-formed PE wheel spokes.

Triple tree lacks detail; no "wiring and cable" diagram.

#### Available from

GreatWall Hobby and Lion Roar products are available online from The Airbrush Company [www.airbrushes.com](http://www.airbrushes.com)

Rating



The true proportions of this tiny model may be appreciated when it is compared to the tip of a lead pencil.



The base was cut from a Reality in Scale plaster cobblestone road section, painted with Tamiya acrylics and dusted with MIG pigments.

A figure was added purely to add life-size reference. This rider was modified from a Dragon Feldgendarmerie set #6061.



The Speedometer was sourced from Archer Fine Transfers, while the helmet liner was sliced from an Ultracast helmet.



The BMW R75 is even smaller than the undoubtedly diminutive 1:35 scale CV-33!



The painted and weathered model. The beautiful, jewel-like MG-42 Machine Gun is a resin offering from K59.



The model was first prepared with a base coat of Tamiya Grey Primer before the camouflage was applied.



The kit's carrier racks are a bit plain, so these were detailed with plastic bits and brass wire. I also added some copper wire and brass strip to the latches.



One of the sidecar's boxes was painted in a faded tri-colour camo, as if it had been taken from another bike.



# Letters

**WRITE TO: MMI Letters, ADH Publishing, Doolittle Mill, Doolittle Lane, Totternhoe, Bedfordshire, LU6 1QX, UK**  
**Tel: 01525 222573 Fax: 01525 222574 Email: editor@modelmilitary.com**  
**The views expressed are not necessarily those of the editor or publisher.**  
**Letters may be edited for publication.**

NEA από την IPMS - Ελλάδας



Austin 10 HP (Tilly) της III μεραρχίας 'Όπως δεινεται το τρίχρωμο τετράγυρο το όχημα μάλιστα ανήκει σε μονάδα τεχνικού. Στην πόρτα του οχήματος υπάρχει θυρέας κάτω από τον αριθμό (Α. Τοπαλογλου μέσω Κ. Φάρου).  
 Austin 10 HP (Tilly). The horizontally divided three colour square indicates that it belongs to a technical unit of the III Div. Nat. Insignia on doors under the number (A. Topaloglu via K. Faros).

## TILLY IN THE GREEK ARMY

First of all, I would like to congratulate you for your excellent magazine. I believe that Model Military International, with its current format and contents, is the best military modelling magazine in the world.

Your latest issue (MMI No. 49) is no exception. I especially liked the "Think Tank" article of Mr Michael Shackleton on the Tilly and the two construction articles on the same subject (Tamiya's and SKP's Tillys in 1/35).

Based on Michael's last phrase on his article, I am sending you three photos of Tillys in Greek (Hellenic) Army's service, in order to show you that the author is 100% correct.

The accompanying black and white pictures were scanned from an old issue of "NEA of IPMS Hellas" magazine (No 4/1991) and show two Tillys with Hellenic Army insignia, probably in late 1950s. The colour photo is of a Tilly

that was found in a scrap yard in Greece. This comes for Hellenic Army's inventory and is going to be restored by its current owner (member of the Hellenic Historical Vehicle Preservation Club - SDIO). I made a complete walk around of it with my camera but unfortunately the vehicle was removed from the place and I did not manage to read its registration plates.

Anyway, I hope you will find those photos interesting.

Thanks for your time and for your great effort to keep your magazines in such a high standard. I am looking forward to seeing your next issues.

Best regards  
 Stavros Soulis  
 (IPMS Hellas 228)  
 Athens, Greece



## CAUNTER SCHEME

IMAGES: 3 and 4 (together), 5  
 In Issue 49, I noticed a difference between William Marshall's interesting article on the Counter Scheme and its colours; and those specified by Mike Starmer in his book on the same colour scheme. Mr. Marshall mentions, in the text, the colour Light Stone BSC 61-ME Standard Colour No. 23 and Portland Stone BSC 64-ME Standard Colour No. 11. Also in the text, he mentions that Light Stone 61/23 is the lighter of the two. Mike Starmer, on the other hand, puts Portland Stone as the lighter by pointing out that in some B&W photos the demarcation between the two lightest colours is hard to see while in others it is quite clear. His explanation for this is that the colour reflectance of Light Stone was very similar to that of Silver Grey where as that of Portland Stone was much higher and therefore showed a distinct difference.

They can't both be correct!

Glen Porter  
 Sydney,  
 Australia

**Ed Says,** Hi Glen. William Marshall has responded to your letter below: *It is virtually impossible to say which of the two colours were used by just looking at a photo. The best we can do nowadays is to make an educated guess based on the following criteria: The timeframe of the specific vehicle in use. The time and place when the photo was taken (if known).*

**Timeline of paint colour in use at the time the photo was taken.**

**Type of film used (pan-/ortho-chromatic).**

**Paint condition, new, used, sun bleached, stained, dusty, etc.**

**Time of day and weather conditions prevailing at the time the photo was taken.**

**The best way of doing this is to make use of a "timeline" showing most of the known details, like GRO orders and ACI instructions that determined the paint colours in use. Then trying to figure out when the photo was taken. Once all this has been done to a certain degree we are able to make an educated guess as to the possible colours used for that specific photo.**

**My personal opinion about the difference in reflectance between Portland Stone and Light Stone is that it is impossible to tell from a 60 year old (plus) black and white photo with any degree of accuracy. There are just too many variables that come into play. Mike and myself have discussed this at length over a steak and good South African wine on some of his visits to my house and have been unable to say with any degree of accuracy how to distinguish between these two paint colours with any sense of absolute certainty.**

**Also, during 1941 there was an acute shortage of green pigment which resulted in the UK adopting SCC IA (brown colour) as the basis of their home camouflage scheme. This must have impacted on Portland Stone which is also green in tone. I also think that it was not used as widely**

**as claimed but that Light Stone was used more readily. Portland Stone as basis colour was only introduced late in 1941 and survived for a couple of months until Desert Pink was introduced in December 1942.**

**My personal opinion is that Light Stone is what we see in most black and white photos today. Anyone who can distinguish between the two paint colours in black and white photos is surely a magician!**

**My good friend Mike bases all his observations on the mixes he has made over the years using Humbrol and/or Revell paints. In my opinion his observations are the most accurate available today, as we do not have anything else to go on. Modern synthetic paint pigments will also not give a 100% paint correct reflectance in black and white photos for the simple reason that they are modern paints with synthetic pigments. The original paints were natural stone ground pigments no longer in use today (so much for accurate model paints today).**

**It will always be something we will never know without finding actual samples of the paint used on some kind of artifact left over from the**

**war. Then it will also be 60 plus years old and the original samples will possibly have undergone colour change over time.**

**I do not think we should break our heads over which is which. Modellers could use either and they both look good. I, for one, still prefer Light Stone as it looks more desert to me than Portland Stone.**

**I hope this will add some spice to the debate!**

**Regards,  
 William**



Light Stone BSC 61-ME, cross-referenced as Standard Colour No. 23



Portland Stone BSC 64-ME, cross-referenced Standard Colour No. 11.

### A STRONG SMALL-SCALE COMEBACK

I've just renewed my subscription to your magazine after a little over a year without subscribing. Last year I felt like the magazine was moving towards the larger scales rather than the smaller. Luckily I have been proven wrong. After my good friends Jason Boulter and Alex Clark has had articles in the magazine and you've even run an article on the group build we ran on the ML forum and Braille Scale Monthly Competition site (which, BTW, is a project done by Jason, Alex, Elliott Winthrop and myself). Good work!

Thanks,  
Steen Tottrup  
Denmark

*Ed Says, Hi Steen. I am pleased that you approve of the recent small scale content. I trust that you are enjoying Justo Mira's Cherbourg diorama in 1:72 scale too. We'll be seeing more progress on that remarkable work in Issue 52 of MMI.*



## DORA - DIE JÜNGERE SCHWESTER

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• Attractive newly discovered late war D-11 and D-13 markings  
• Color photo-etched details  
• Express mask  
• Kit provides realistically engineered open landing wheel well roof with engine backside and other inner fuselage equipment inside  
• Wing guns external details designed for both variants

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# ONE WAY TICKET

**José Brito** tackles the 1:35 scale multimedia kit of this expedient Soviet Self-Propelled Gun.

**A**t the beginning of the Great Patriotic War, the Red Army had no tank destroyers or any similar vehicles in production. Before the war, several projects were developed and some of them were built. However all of those projects were abandoned later for various reasons. That is why, on 1 July 1941, the Minister of Weapons signed an order to develop and produce a 57mm tank destroyer. All projects were to be finalised not later than 15 July, 1941. The development of a 57mm tank destroyer was assigned to the Factory #92 in Gorky (today, Nizhniy Novgorod).

To accomplish this task, a special group of engineers was summoned to the factory's design bureau. The head designer was P.F.Murav'ev. In a very short time the new SPG was designed and realized as a prototype.

It should be noted that two different prototypes were built: the ZIS-30 and ZIS-31. The ZIS-30 was

a light tank destroyer based on the "Komsomolets" tractor. It was armed with an open 57mm ZIS-2 AT-gun, protected only by the gun's shield. For better stability the vehicle was equipped with two extendable skids.

The ZIS-31 had the same armament but was based on an armoured truck (the GAZ-AAA). In July-August both solutions were tested. The tests showed better gunnery results for the ZIS-31. However the ZIS-30 showed better manoeuvrability in rough and swampy terrain, and thus was selected for service.

Soviet Factory #92 was ordered to begin ZIS-30 production by September 1, 1941, however, a new problem surfaced. At that time the only one factory produced the "Komsomolets" tractors - it was Moscow factory #37. However, in August 1941 this factory switched its production from tractors to tanks, so no factory in the USSR produced this type of tractor any more. The decision was made to collect tractors from Red Army units. We can just imagine the condition in which those tractors were received after their use in the Army! As a result the production of the ZIS-30 tank destroyer began





BVM's parts are not labelled, making the kit more like a three-dimensional jigsaw puzzle!



The tiny individual track links are supplied in plastic.



The Komsomolets body is mainly resin, while the gun is plastic.



The basic kit was detailed with wire and other basic modelling materials.



The tow cable is copper wire with resin towing eyes.

on 21 September and continued up to 15 October, 1941. During this period the factory #92 produced 101 tank destroyers (including one experimental) with the 57mm gun and another with a 45mm anti-tank gun. Further production was cancelled due to a lack of tractors.

The ZIS-30 tank destroyer served from the end of September 1941. Some of anti-tank batteries

and 20 tank brigades of the Southwestern and Western Fronts were equipped with these vehicles. At that time this tank destroyer was called the "ZIS-2 57 mm AT-gun".

The new tank destroyer was very successful because of its excellent gun. In 1941-1942 this gun could penetrate any type of German tank from long range.

#### CONSTRUCTION

The ZIS-30 from BVM is one of those annoying kits where the parts are not numbered. It is like a 3D puzzle. The modeller needs to see how the piece looks in the instructions and then search for it in the sprues and bags. The resin parts are represented in the instructions, with a big "R". For the plastic parts only the drawing

is provided. Thanks to this, the construction can be a little tricky and extra attention is necessary. Some parts of the instructions are not very clear and we need some good references for an accurate building. Otherwise the kit is very nice and features good detail. The subject is also very unusual and interesting.

Construction starts with the ▶



One of the track runs was assembled to represent a damaged vehicle.

The model is surprisingly small when complete.

► running gear and lower hull followed by the upper hull and main gun. All the Komsomolets parts are made in resin and the separate track links are in plastic. The 57mm Zis-2 gun is in plastic with a resin shield. The main gun received some extra details made from plastic card and lead foil. Some other parts received extra details in lead wire from Plus Model. I also added some extra items like ropes and straps. The ropes were made with twisted Plus Model lead wire and the straps with some photo-etched parts from the spares part box. They add a more used and battered look to the model. Also, these small details give an extra touch of realism. I decided to represent my Zis-30 abandoned, so one of the track runs was built to look destroyed.

Once the model was built I could see that even in 1:35 the Zis-30 is a really small model. I placed it near a Tiger in the same scale and the Tiger's main gun is bigger than the Zis-30. I just can imagine the Zis-30 being hit by a Tiger!!

#### PAINTING

With the construction done it was time for painting. As usual I used acrylics from Tamiya range. I am a big fan of those paints and I always can achieve the finishing I am looking for.

The entire model received several coats of Tamiya acrylics XF-10 Flat Brown as usual applied with my Aztek 470 with the orange tip (for large surfaces). I applied several coats in order to keep the surface detail. Once the Tamiya XF-10 Flat Brown well dry, it was time for the Zis-30 main colour. For that I used the Tamiya Acrylic XF-61 Dark Green. Once again, this colour was sprayed in several coats to keep the surface detail. Once dry, I made some colour

All paints were applied with the Testor Aztek A470 airbrush. In this case, the Orange coloured tip was fitted. The base colour was Tamiya acrylic XF-10 Brown.



The fine tan coloured tip was now fitted to the Aztek airbrush and used to add light and shade to the little vehicle.



A mix of Tamiya XF-45 Flat Flesh and XF-61 Dark Green was applied as a selective fading coat.



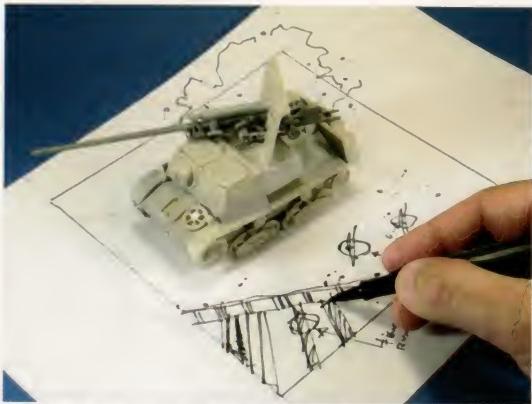
The main gun and shield were painted in Tamiya XF-2 Flat White.



Chipping of the whitewash finish was achieved using Vallejo Model Color acrylic paints.

Weathering commenced by applying thousands of scratches with a brand new fine brush (10/0). Once the scratches are dry, small details like the canvas covers, ropes and strap were painted with acrylics from Vallejo applied with a very fine brush.





The diorama base was sketched out on paper before committing to the actual materials.



The base was built on a timber block and featured sides of balsa wood.



Blocks of foam created the basic structure of the multi-tiered base.



Heat isolation foam and pre-made filler smoothed out the terrain texture.



The terrain starts to take shape.



The wood parts were made with real wood from naval model making.

modulation combining Tamiya XF-61 Dark Green with Tamiya XF-15 Flat Flesh. The mix was airbrushed according the zenith light technique and into the middle of the panels. To add even more interest to the model I painted the main gun and shield in Tamiya XF-2 Flat White.

The Zis-30 is a small model and the painting steps are very straightforward so soon we can start with the weathering and finishing.

#### WEATHERING AND FINISHING

I started weathering by applying thousands of scratches with a brand new fine brush (10/0). This

is a very time consuming process and can ruin the entire model if overdone or done in the wrong places. Those scratches must be made in the most logical places. The places here the crew stands and the parts more exposed to the elements. During this process we must stop constantly and see how it looks. This is very important because sometimes we get excited by the process and can ruin the entire job. Much care and attention is needed. The main colour used in this process was the Vallejo acrylic Model Color 896 Extra Dark Green.

Once the scratches are dry, small details like the canvas covers, ropes and strap were

painted with acrylics from Vallejo applied with a very fine brush. With the scratches and details well dry, it was time for the washes and filters. For that I used mainly oils from Winsor & Newton colours. Winsor & Newton 2 Burnt Sienna, Winsor & Newton 25 Lamp Black, Winsor & Newton 40 Titanium White and Winsor & Newton 35 Raw Umber. They were diluted with Winsor & Newton Sansodor (Low Odour Solvent). They were applied like pin washes over the recessed areas and over all the details. In some parts they were applied in vertical lines to represent the exposure to the elements. Those steps together really brings the

model to life and add that used and stressed look

With the wash thoroughly dry, it was time to apply some pigments and pastel powders. In this case I used MIG Europe Dust P028, MIG Dark Mud P033 and several pastel powders colours. They were applied dry and wet mixed with water and Talens Amsterdam Acrylic Medium 117 Matt.

#### FIGURES

I put figures in all my projects. They add the sense of scale and can tell a story. I consider that they lend a human factor to the scene. This project was no exception. I wanted to represent ▶



The wood was cut to size and glued the ground with the help of Super Glue.



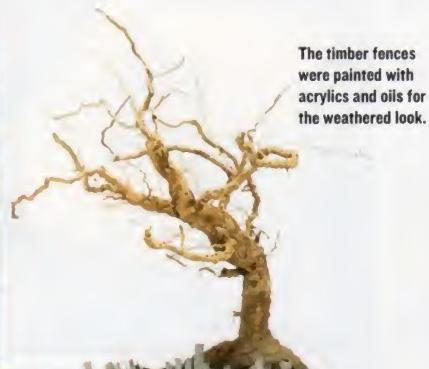
A spring green root was cut to scale and placed on the top of a small hill.



For the terrain I used a mix of Robbiaac Aguapiast, acrylic paint, fine sand and water.



The tree adds interest and a dramatic look to the overall scene.



The timber fences were painted with acrylics and oils for the weathered look.



RMG barbed wire is real barbed wire, just smaller, so take care when handling.



The texture and colour is now suitably muddy!



Tiny autumn leaves were added to the branches of the tree.

► the fast advance of the German troops and the lack of resistance of the Russian defences in the first stages of the Barbarossa.

I have used figures from Master Box in some of my recent projects. The figures from this company are very original and they represent good value of money. Normally the boxes have four or more figures and the poses are great. The detail is very good and with some extra work they will look very nice in the diorama.

For this project, I used two figures from the "German Signals Personnel" set, ref. MB3540 and another figure from the box "German Panzergrenadiers (1939 - 1942)", ref. MB3518. The major transformation I made was replacing the heads with resin items from Hornet. They have a better facial expression and are more suitable for the scene I was planning. I wanted to represent a stressed look. The Eastern Front was hell on earth. The front line

combat troops were stressed and near nervous breakdown. My idea was to represent some soldiers running. They saw something strange and have that stressed look. It is basic instinct to kneel when we are apprehensive.

Once built, they were airbrushed with Tamiya XF-15 Flat Flesh as primer in several very diluted layers to keep all the surface detail.

Vallejo Acrylics were used for the clothes and small details; and oils for the flesh areas. The

painting is very straightforward and the final touch was to apply some pigments and pastel powders. In this case I used MIG Europe Dust P028, MIG Dark Mud P033 and several pastel powders colours. They here applied dry and wet mixed with water and Talens Amsterdam Acrylic Medium 117 Matt. Mainly, applied over the boots and trousers.

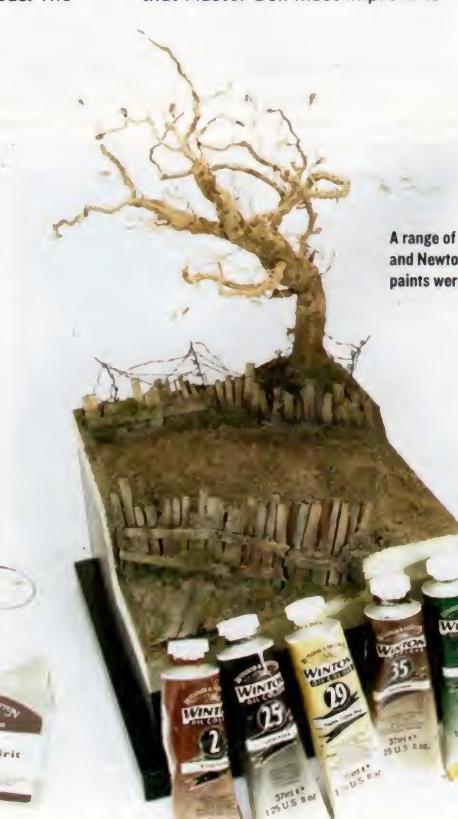
I really like to paint 1:35 figures. However, in my opinion a part that Master Box must improve is



Looking good, but more weathering is to come.



Thinned oil paints add life to the scene.



A range of Winsor and Newton oil paints were used.



Figures were sourced from Masterbox, with replacement Hornet heads.



Weapons were detailed with lead foil straps.



The figures and the vehicle are test-fitted prior to painting.



Vallejo acrylics were used for the uniforms, while oil paints were used for the flesh.



The figures are clearly under stress.

the facial expressions. Otherwise the figures are great and very accurate. In fact, they are a delight to build and paint.

#### BASE AND DIORAMA

As usual, my diorama base started with a wood base, side walls in balsa wood, interior filled with oasis foam or heat isolation foam and pre-made filler to make the terrain texture. For the terrain I used a mix of Robbialac Aquaplast, acrylic paint, fine sand and water.

Robbialac Aquaplast is a filler used in civil construction and is water based. So like that it can be mixed with water and is very easy to work. The mix of all those materials looks like chocolate mouse and can be applied with the help of a medium flat brush. Once dry it looks great and very realistic. Also dries rock hard.

Once well dry, a dry brush with oils was applied with a large flat brush. The colours were mainly brown and green tones mixed

together. The idea is to enhance all the surface detail.

The barbed wire and twisted metal bars are from the Portuguese company RMG Resin Models. This barbed wire is really barbed wire and if we don't take care during handling we can get hurt. The detail is awesome and it is definitely the best barbed wire available in 1/35 scale. The twisted metal bars will fix the barbed wire in place.

The wood parts were made

with real wood from naval model making. They were glued the ground with the help of Super Glue and once in place they were painted with acrylics and oils for the weathered look.

Small dots of synthetic grass were applied with UHU Arts & Crafts Glue. I used a brown colour grass and later airbrushed it with several green colours. I apply the grass in small dots to look more natural and convincing. This is a boring and time consuming ▶

**CMK New sets from CMK 1/35 scale**

B35075 German tank seats WW II (2 pcs)	3123 Panther Transmission set for Tamiya / Dragon kit	3123 Tiger I Fuel tank and cooler (starboard) for Tamiya kit
B35078 German tank radio set Fu 2+Fu 5 WW II (2 sets)	3121 T-55A Driver's set for Tamiya kit	3122 US Transmission for M4 Sherman series
B35078 German tank radio set Fu 2+Fu 5 WW II (2 sets)	3121 T-55A Driver's set for Tamiya kit	3122 US Transmission for M4 Sherman series

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process, but necessary for a realistic final look. A spring green root was cut to scale and placed on the top of a small hill. This tree adds interest and a dramatic look to the overall scene.

#### CONCLUSION

This project was very enjoyable. The BVM 1:35 scale Zis-30 kit is very nice and can be transformed into a well-detailed and very original model. Combined with some good figures and good accessories it is possible to create a nice scene. ■

#### Modelspec

BVM 1:35 ZIS-30 57mm SP Gun Kit No. BVM-35062

##### Items used

1/35 Best Value Models, Zis-30  
1/35 Master Box, German Signals Personnel, MB3540  
1/35 Master Box, German Panzergrenadiers 1939 - 1942, MB3518  
1/35 RMG Resin Models, Barbed Wire, RM013  
1/35 RMG Resin Models, Barbed Wire Entanglements, RM040

##### Materials and paints used

Hood glue, Plastic glue, Contact glue, Heat isolation foam, Wood base, Injected plastic, Resin parts, Plastic card, Metal parts, Metallic chain, Plus Model Lead wire 0.4mm, Vallejo acrylics, Tamiya acrylics, Talens Amsterdam Acrylic Medium 117 Matt. Dry Pastels, Aquaplast - Robbialac, Fine sand. Pigments: MIG P028 Europe Dust, MIG P033 Dark Mud. Oil colours: Winsor & Newton Oil Colour 35 Raw Umber, 2 Burnt Sienna, 25 Lamp Black, 29 Yellow Hue, 40 Titanium White.

##### References used

[www.battlefield.ru](http://www.battlefield.ru)  
Several internet forums.

- The BVM kit is very original and unusual.  
Good surface and overall detail. The Master Box figures are a great value of money.
- The BVM instructions are not very clear.

##### Available from

Bets Value Models - [www.azimutproductions.com](http://www.azimutproductions.com)  
Masterbox are distributed in the UK by  
[www.creativemodels.co.uk](http://www.creativemodels.co.uk)

#### Rating



**"The ZIS-30 from BVM is one of those annoying kits where the parts are not numbered. It is like a 3D puzzle..."**

The BVM 1:35 scale Zis-30 kit is very nice and can be transformed into a well-detailed and very original model.



Careful weathering adds to the impression of an abandoned vehicle.



The Hornet heads are a definite improvement over the Masterbox items.



# STANDARD CAMOUFLAGE COLOURS FOR MIDDLE EAST



## PART THREE MARMON-HERRINGTON MK.III ARMOURED CAR

William Marshall continues his analysis of an important source document describing the contentious camouflage colours used by British and Commonwealth military vehicles during the WWII campaign for the Middle East and North Africa. In Part Three, William describes the application of Caunter camouflage to the Marmon-Herrington Mk.III in the Middle East.

The Caunter scheme as applied to the Marmon-Herrington armoured cars was surely one of the most interesting in the Middle East. This scheme had the radiating pattern, which can be seen in a number of photos. It did not last long and was soon replaced by the more practical scheme of overall Light Stone and Dark Green. Already I can hear a number of experts questioning this colour scheme... ■

*Top and Left: A Marmon-Herrington Mk III armoured car painted in the Middle East Caunter scheme. (Photo: Author)*

*Below: The Marmon-Herrington Mk III profile based on the previous photos. The spare wheel has been left off the side profile for the sake of clarity.*

Main HQ, 1 SA Infantry Division, issued an instruction on 9 October, 1942 to all units under command stating that the policy in the 8th Army with regard to painting AFVs and armoured cars had been changed. All AFVs including armoured cars were to be painted with a single disruptive colour of Dark Green. This would last until new schemes had been devised and made known.

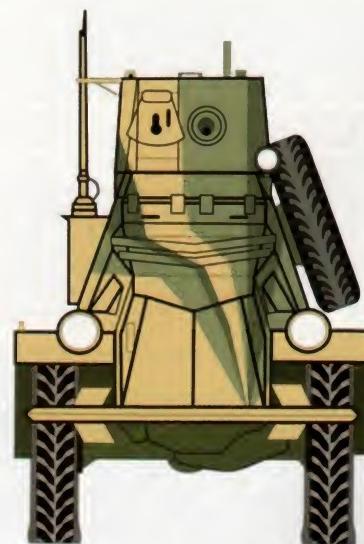
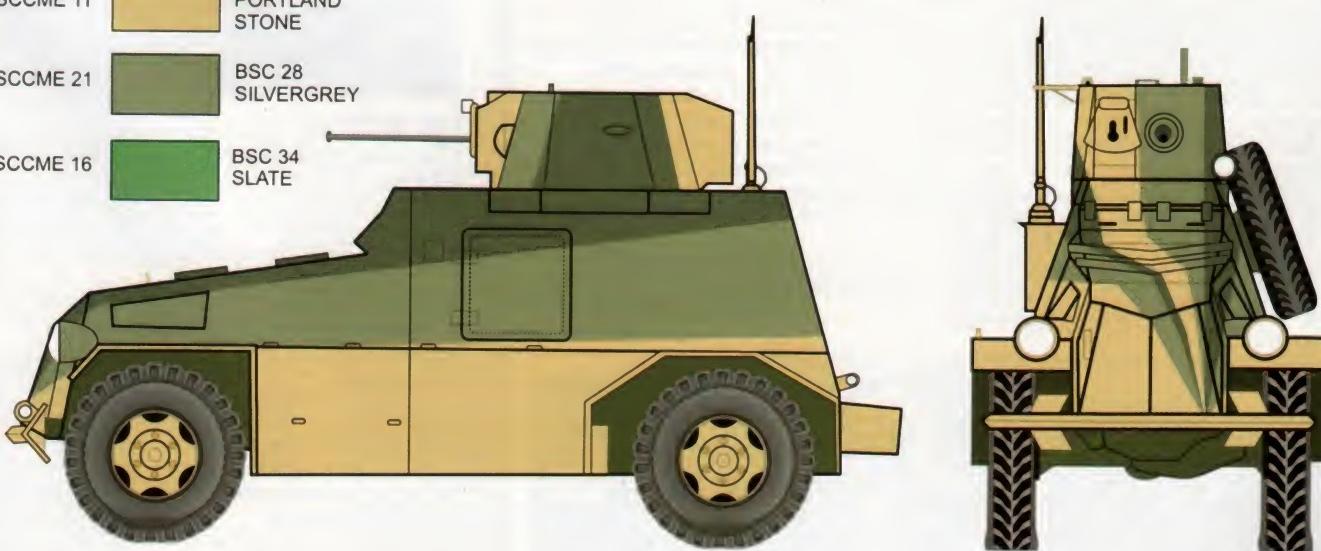
Thus we find that there was again a change in the basic colour schemes for armoured cars to a single base coat with a single disruptive colour (Dark Green). When studying photographs we can see this scheme on some of the M4 Sherman tanks and also on Marmon-Herrington armoured cars.

The later advised scheme was the now well-known 1943 scheme issued with drawings for each type of vehicle.

SCCM 11      BSC 64  
PORTLAND STONE

SCCM 21      BSC 28  
SILVERGREY

SCCM 16      BSC 34  
SLATE





# Figures - A round-up of the latest figure sets on release...



## DRAGON

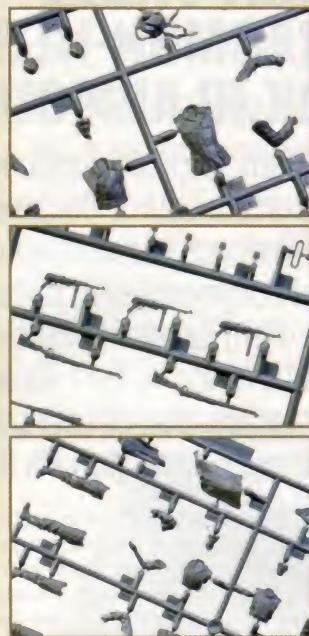
**1:35 SCALE**

**GERMAN WARRIORS 1940-41**

**ITEM NO. 6574**

Dragon's 1:35 scale German Warriors 1940-41 comprise five figures that are all posed well and could all be used in many a diorama/vignette. I really like the fact that they are not action posed, but are in different stages of getting ready to either go out or are returning and stripping themselves of their equipment. There are five sprues of grey plastic, consisting of 116 parts, being for the figures themselves, weapons and equipment. All are highly detailed, and what is not used this time will be welcome in the spares box. This is a fantastic set and comes highly recommended.

Thanks to The Hobby Company Limited for the sample  
[www.hobbyco.net](http://www.hobbyco.net)  
 Andrew Judson



## AURORA MODEL

**1:35 SCALE**

**WWII GERMAN RED CROSS NURSE VER.3, ML029**

**WWII GERMAN ANTI-AIRCRAFT AUXILIARIES, VER.2, ML030**

**WWII GERMAN ANTI-AIRCRAFT AUXILIARIES, VER.4, ML031**

**WWII GERMAN RED CROSS NURSE VER.4, ML032**

I must say that Aurora Model from Japan was one of the best surprises of the end of 2009. I found their website by luck and it was love at first sight. Besides the originality and natural poses, the quality of their white metal figures has to be seen to be believed. Their figures are absolutely stunning. I am having some difficulty in this review because I have no more words to describe their figures. All I can say is visit their website and enjoy! I will for certain use them in my diorama "Berlin 1945" that I am planning to build by the end of 2010.

Highly Recommended.

Thanks to Aurora Model for the samples [www.aurora-model.jp](http://www.aurora-model.jp)  
 Jose Brito

## AC MODELS

**1:10 SCALE**

**ACM10B014 - LIEUTENANT NECHIPORENKO,  
 NOVEMBER 1942**

**ACM10B08 - NEW ZEALAND MOUNTED RIFLES/  
 AUSTRALIAN LIGHT HORSE, MIDDLE EAST 1917**

I would have to say that Andy Cairns of AC models is one of the most active sculptors I have seen. Two more of his large scale busts grace the review bench this month.

The first is a 1:10 scale Russian Tanker, Lieutenant Nechiporenko, sculpted from an actual photo. It is very well done. Inside the box are three resin parts, being a base, full bust with head attached and the left hand side flap to his tankers helmet. The casting is very clean and detail is of a high standard. I especially like the heavy quilted jacket.

This should be an easy bust to prepare and paint with minimal cleanup required. My only negative remark for this is that it would have been nice to have a small copy of the actual person as reference, though it may be a copyright issue. Overall though, this is an excellent bust.

The second release is a little more complex, but is a very clever concept combining both a horse and its rider into one bust. How is this done? Well pretty much the rider is attached to the horse with his arm; and the horse is attached to the base with a nice alloy rod.

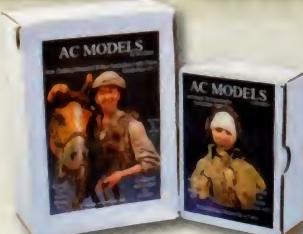
Inside the box are fifteen resin parts thirteen metal parts being for the horse's bridle, a length of string, a small sheet of 0.5mm alloy, a single sheet of instructions for the bridle and water bottle straps, and some very small feathers for the hat's plume if you wish to do so, and also for horse's eyelashes.

Very minimal cleaning is required and fit appears to be very good, as is the detail.

This is an excellent bust with plenty of character in both the rider and horse and would make a welcome addition to the collection.

Highly recommended.

Available online from Colorado Miniatures [www.coloradominis.com](http://www.coloradominis.com)  
 Andrew Judson



## SKP MODELS

**1:35 SCALE WAAF DRIVER**

**ITEM NO. SKP088**

After releasing their recent 1:35 scale ATS driver, SKP from Czech Republic offers another superb 1:35 scale female figure. This time it is a WAAF (Woman's Auxiliary Air Force).

This is a full resin figure with a natural and convincing pose, top quality casting and with great small details. The figure is composed of five main resin parts. The head, body, two arms and a small piece are all that you will need to assemble. The construction is very straightforward and only minor cleaning is necessary. This figure will look great standing by any WWII RAF vehicle or in any vignette or diorama. This WAAF figure also suggests a great conversion potential.

Highly Recommended.

More details available from [www.skpmodel.eu](http://www.skpmodel.eu)  
 Jose Brito



# FLAK ON TRACKS

The Editor examines the third in Greatwall Hobby's sWS family - the anti-aircraft Flak 43 version, along with four related accessory sets available separately.



Two good sized photo-etched frets are included, providing mesh for the side gates and shell case basket.



Generic markings are offered via blank number plates and individual digits.



The gun shield is moulded in admirably thin plastic.



The plastic kit 3.7cm gun barrel is hollowed at the end with dimples and recessed slots.



The optional Lion Roar brass gun barrel is beautifully detailed with all the appropriate holes and slots in the muzzle brake.

**T**he Schwere Wehrmachtsschlepper (sWS) was a 5 tonne, low-speed half-track designed to replace the 3 and 5 tonne half-track models in service, such as the Sd.Kfz.6 and Sd.Kfz.11. The initial unarmoured cargo version was produced by Büssing-NAG from December 1943 until war's end, with a total of 825 units produced. The armoured cab and engine compartment version, looking similar to the Sd.Kfz.251, started appearing in the middle of 1944.

The sWS was powered by a 6 cylinder, water-cooled Maybach HL42TRKMS gasoline engine generating 100 horsepower (75 kW), which gave it a top speed of 28 km/s per hour (17.0 mph) and a maximum range of 300 kilometers on roads.

Greatwall Hobby released their infrared searchlight and standard cargo versions of the sWS in 2009 to general acclaim. The latest variant in the line is the 3.7cm Flak 43 auf schwere Wehrmacht Schlepper. Kit No. L3516.

The armoured cab and rear tray are largely common with the previous releases. The tray features large photo-etched grilles for the fold-down side flaps. The new 3.7cm Flak 43 gun is crisply moulded and well detailed. It features a one-piece plastic barrel, cleverly hollowed out at the end and with dimples in the muzzle brake (these could easily be drilled out if desired) and photo-etched mesh shell casing basket. The gun shield is made up from plastic parts but these are admirably thin.

The model includes the same individual link tracks as its predecessors.

Markings are supplied for one generic Luftwaffe vehicle; with a blank "WL" number plate and four sets of the digits 0 - 9. Individual instruments are also supplied as decals, as are two weight stencil markings.

Although the model should look great straight from the box, Greatwall Hobby / Lion Roar has also released three supplementary sets for the determined superdetailer.

The first is Set No. L3506, which includes 16 pieces of 3.7cm ammunition plus six empty shell cases, all in turned brass; plus two photo-etched cartridge cases.

Set Number L3514 is a turned brass gun barrel, hollowed at the end and with a properly perforated and slotted muzzle brake.

Set No. L3516-T is a comprehensive photo-etched detail set that completely replaces the gun shield with an in-scale multi-part metal item, and also adds oodles of detail for the interior and exterior. As a bonus, this set also includes turned brass width indicator poles for the front fenders.

If this is still not enough for you, Greatwall has also released several versions of the Maybach HL42 engine that may be appropriate for your sWS too. You will certainly see the benefit through those positionable engine hatches!

Greatwall Hobby's sWS Flak 43 is a very nice kit in its own right, but the availability of the separate accessories and upgrades will be welcomed by many. ■

Thanks to The Airbrush Company for the samples  
[www.airbrushes.com](http://www.airbrushes.com)



Lion Roar Set No. L3506 provides full shells and shell casings in turned brass plus photo-etched cartridge cases.



The Greatwall / Lion Roar photo-etched set, available separately, adds a wealth of detail.



Several versions of the Maybach HL42 engine have been released by Greatwall too.

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Italeri revisits two of their 1:35 scale releases to deliver a useful combination. Graham Tetley explains.

# LCVP + JEEP

**T**asked with shuttling supplies between the big ships and the beaches, LCVPs saw service in all of the major amphibious operations of WWII. Of the nearly 24,000 built, some saw service in Korea and Indochina and can still be found today. It could carry up to 30 men, light vehicles and any supplies that were needed, and the Allies' amphibious landings would have resulted in far more casualties had the LCVP's not been available.

Almost five years ago now Italeri released this as Kit No. 6441. What this re-release gives us is two kits in the one box with the same basic LCVP but this time also with the Italeri Jeep, trailer and soldiers (number 314) to fill it.

We are greeted by a large box with attractive artwork, photos of the kit contents and a brief history. I should point out here that the poses and clothing of the figures on the artwork does not represent what comes in the box. Being two separate kits, I will give an overview of each in turn, starting with the LCVP.

There are 157 light grey plastic parts, plus two different types of string included. There is no flash on my kit with all parts being cleanly moulded. The main hull is one large, single tub with reasonable rivet and weld seams present. There are four brackets, two each side, moulded onto the hull but their definition suffers due to the constraints of injection

moulding. I would be inclined to scratch build these back, but they can just as easily be cleaned up with a sharp knife and a file.

The inside of the hull gets separate walls with a rather unique way of representing its ribbed structure. Twenty separate parts each side provide these ribs and onto those go the mechanisms for the winch gear. The cabling provided has to be threaded through several parts before being tied to the ramp and this, I suspect, will be trickiest part of assembly. Detail on the hull floor is very good, as is the inside of the ramp, and Italeri provide locating pegs that ensure the deck will be positioned the correct way around.

There is some nice detail around the wheelhouse and the two machine gun turrets come as identical items. The machine guns themselves are a little chunky but acceptable. The crew figures supplied to fit into these turrets are identical, but the coxswain has an identical body but different arms. The details on the figures are soft and the facial definition is rather odd, so it may be best to use after market heads for all figures.

The instruction sheet is nice and clear and comes with a brief history and a parts breakdown to check for completeness. The decals are from kit 6441 and provide markings for 4 boats, two from the Pacific and two for Normandy. They are water slide, well printed with good definition and come on thin carrier film. The Royal Navy

camouflaged version looks rather attractive and is the way that I shall be going.

The Jeep is the 1970s vintage model and comes in 116 olive green parts with 4 clear ones for the headlights and windshield. This kit is not as crisp on detail as the newer Tamiya model but it is still quite acceptable, being made at that time when Italeri kits were the best out there. It still holds up exceptionally well.

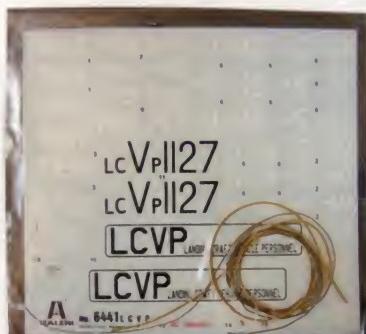
To compliment the Jeep you get the trailer, tarpaulin, a driver and two soldier figures. In my humble opinion the figures in this kit are not up to today's standard and are best replaced as the detail is soft and poses a little wooden.

Most of the parts for the jeep are devoted to the suspension and a nice, but basic, engine. You will have to paint the dashboard dials as no decals are provided, but all necessary controls and levers are there to make a very acceptable jeep.

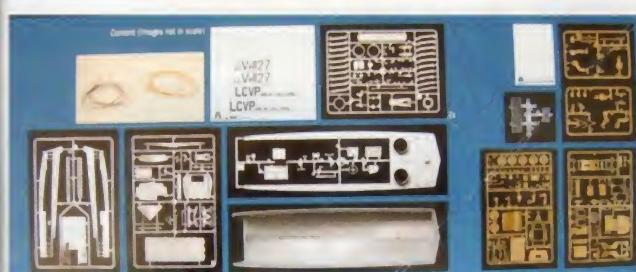
Markings are provided for 4 vehicles and, again, the instruction sheet is clear and uncluttered.

Italeri has delivered a nice combination of two kits here. The main details are captured very well with only a few minor areas needing attention. My hope is that someone such as Miniart or ICM will do a figure set or two with which to fill the LCVP, but if that is not your fancy then you could substitute the Jeep for a Universal carrier, artillery piece or cargo. ■

Thanks to Italeri for the sample  
[www.italeri.com](http://www.italeri.com)



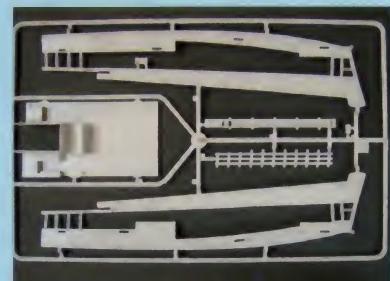
Decals and two styles of string are also included.



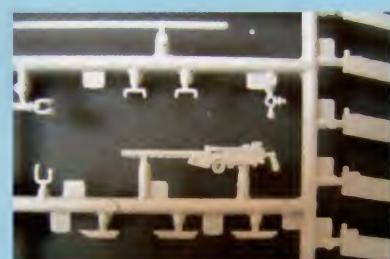
An overall summary of the kit contents.



Moulding quality is high, with details on the deck seen here.



Inner hull details.



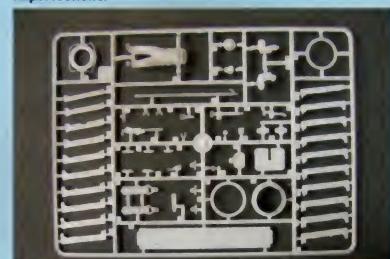
.30 cal machine gun – one of two supplied with the LCVP.



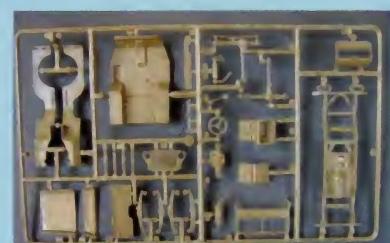
The ramp may be left moveable, posed up or down.



The size of the main mouldings does lead to some imperfections.



Two crew figures are supplied for the LCVP.



The 1970s vintage jeep holds up surprisingly well in the second decade of the 21st Century.

To have your event included on this page, send your details to:  
**Diary Dates**, ADH Publishing, Doolittle Mill, Doolittle Lane,  
 Totternhoe, Bedfordshire, LU6 1QX, UK  
 Tel: 01525 222573 • Fax: 01525 222574 • Email: editor@modelmilitary.com

## June 5th

IPMS Salisbury UK Model Show and Competition - 5 June 2010  
 IPMS Salisbury UK is holding its annual Model Show and Competition on Saturday, 5th June 2010 between 0930 - 1630 at Wyvern College Sports Hall, Church Road, Laverstock, Salisbury, SP1 1RE, UK. There will be over 45 Clubs, SIG's & Traders, Free Children's "Make & Take", Demonstrations, Competition plus refreshments and tombola, together with free on site parking. Further details from Don Bartlett Telephone 01985 851113, Email kateanddon@btinternet.com or visit us at <http://ipmssalisbury.blogspot.com/>

## June 6th

MAFVA UK National Competitions for 2010  
 The Annual MAFVA UK National Competitions for 2010 will be held at the Imperial War Museum Duxford, on 6 June. The MAFVA marquee will also host a large number of model displays from regional MAFVA clubs, a bring and buy stall, and one of the best gathering of traders in the country specializing in military vehicle modelling. In conjunction with the MAFVA Competition

there will be a military vehicle rally and a military book fair on the same day. The Duxford Museum will run some of their tanks on their display course, and there will be number of vintage aircraft flying from the airfield. For further details e-mail paul.middleton600@ntlworld.com or visit [www.mafva.net.uk/nationals](http://www.mafva.net.uk/nationals) and <http://duxford.iwm.org.uk>

## June 26th

AMC BELGIUM 18TH ANNUAL MODELLING DAY  
 Amay Modèles Club will be hosting its 18th Modelling Day (competition, exhibition and swap) at the IPES Huy, 6 Avenue Delchambre, B-4500 Huy (Belgium). Contact: Michel Calluy, 13 Thier du Moulin, B-4530 Villers-le-Bouillet (B) Tel: 00 32 85 231086 michel.calluy@skynet.be Also available on the AMC Web site [www.amaymodelesclub.org](http://www.amaymodelesclub.org)

## September 4th

Cornish Scale Modellers (IPMS West Cornwall) annual model show will be held on 4 September 2010 at St.John's Hall, Alverton St.Penzance, TR18 2QR from 10:00-16:30.

There will be Clubs, Traders, & Competitions on the day. Admission - adults £1.50, children £1.

Contact Tim Rowley (Chairman) 01736 757945 or Dave Edwards 01736 360683. e-mail [ipmswestcornwall@hotmail.co.uk](mailto:ipmswestcornwall@hotmail.co.uk)

## September 19th

The Sutton Coldfield Model Makers Society Model Spectacular 2010 will be held on Sunday 19th September from 10.00am to 4.30pm. There will be a model competition in Junior & Senior categories, Visiting Clubs and Traders Admission £3.00, Concessions £2.00 Contact Point for Clubs - Matt Johnson 01827 61155 Contact Point for Traders - Robert Day 0176 654 0469 Website: <http://www.suttonmodellers.fotopic.net>

## October 3rd

The 2010 East Anglian Model Show will take place on Sunday, 3 Oct 10, at Ipswich Town Football Club, Portman Road, IPSWICH, Suffolk IP1 2DA, between 10:00am and 4:00pm. Admission is £3.00 for adults, £1.00 for accompanied children (12 years and under)

and £1.50 for concessions and unaccompanied children. The event incorporates the East Anglian Model Competition, which features specially commissioned winners' medals that are attractive and truly unique. A bar and refreshments are available throughout the day. More information may be found online at [www.ipms-ipswich.org.uk](http://www.ipms-ipswich.org.uk), or by email to Kelvin English at [kelvin.english@live.co.uk](mailto:kelvin.english@live.co.uk)

## October 30th

Gravesend Military Modelling Society will be holding their annual Open Day and competition on Sunday October 30th at Chalk Parish Hall, Lower Higham Road, Chalk, Gravesend, Kent. The show has a great friendly atmosphere supported by local traders and model clubs, as in previous years the competition classes are open to all with a maximum of three entries per person in any one class. Doors open at 10.00 closing at 16.00. For further details and bookings please contact Jean Bickerstaff on 01474 327003 G.M.M.S. web site may be found at [www.gmms.org.uk](http://www.gmms.org.uk) Sat Nav post code DA12 2NB

# THIS MONTH IN TMMI

Tamiya Model Magazine International 176 - June10

- Alex Kustov builds Tamiya's 911 GT3 in 1:24 in fabulous black
- Trumpeter's 1:35 T-62, built almost box-stock...
- Hasegawa's 1:32 Fw190F-8
- The concluding part of Robert Döpp's Tamiya's 1:16 Panther ausf.G project
- A photo report from the Polish Army museums of Warsaw and much more...



# THIS MONTH IN MAI

Model Airplane International 059 - June10

- The first part of the two-part feature by Cyrus Tan on converting the Italeri 1:48 Mirage IIIIE into an IAI Kfir
- Libor Jekl builds Italeri's latest 1:72 kit, the Savoia-Marchetti SM.81
- The One-Month Fighter Roden's latest 1:32 WWI offering, the Siemens-Schuckert D.III built by Andy Ieronymides
- The Bronco Models 1:48 RQ/MQ-1 Predator by Steve A. Evans, CMR 1:72 Vampire F Mk I by Libor Jekl and Wingnut Wings 1:32 Junkers J.I by Andy Ieronymides and much more...





# Small Scale A round-up of the latest news and releases in 1:72 and 1:76

## ARMORY RESIN DETAIL SETS

Armory has sent a number of new detail sets covering quite different subjects. These have been mastered using CAD and 3D printer technology. The Armory range can be found at [www.armory.in.ua](http://www.armory.in.ua) and are also available via HobbyTerra at [www.hobbyterra.com](http://www.hobbyterra.com)



**1:72 BTR-80/80A (KI-126) WHEEL SET • KIT NO. AR AC7272**

This set contains eight tyres and hubs intended for the Trumpeter BTR-80 kit. They represent the later style of tyre seen on late model BTR-80 vehicles (and the related BTR-80A) and capture the more bulky appearance of these tyres well when compared to the earlier type.

The parts are very cleanly moulded in a pale tan coloured resin. There were no air bubbles or flash present at all so the set is literally ready to use from the packet. The tread detail is outstanding, being fine and crisply reproduced. The poor plugs have all been removed from the tyres, leaving the smallest of marks that will be easily hidden at the bottom of the tyres.

Test fitting the hubs showed a small gap around the edge, so I'd recommend using gap filling super-glue or two-part epoxy to help fill this.

These are a clear improvement over the versions provided in the kit and will be simple to fit to the model.

Highly recommended.



**1:72 SOVIET RAILROAD BUFFERS  
KIT NO. AR AC7282**

This is a small set of four buffers intended for Soviet rail cars and draisines. The parts are very fine and delicate and as such are thoughtfully packed in a small resin box for protection. They are attached to the bottom of the box with a sticky strip and can be simply pulled away ready to use. No clean up is necessary as there is no flash or air bubbles apparent.

This is a very simple set that will require little effort to use. The finesse of the parts will be an improvement over any injection-moulded versions. Highly recommended.

**1:72 DSHK 12.7MM MACHINE GUN  
KIT NO. AR AC7239**

Another well-detailed accessory set, the DShK heavy machine gun is intended for earlier post-war Russian tanks such as the T-54/55/62 series. As with the buffer set, the parts are all delicate and are attached via a sticky strip to the bottom of a small resin box for protection. A tiny etched metal set is also included for some of the additional details. With only 5 resin parts that require no cleanup along with 3 metal items, assembly will be quick and easy.

Compared to the equivalent parts in kits from ACE, PST and trumpeter, this is clearly a great improvement.

Highly Recommended.  
*Alex Clark*

## KIT PREVIEW Trumpeter 1:35 British Challenger 2 Enhanced Armour • Kit No. 01522



Trumpeter's 1:35 scale upgraded Challenger 2 Enhanced Armour is more than a simple reissue with new parts. Andrew Judson explains.

# CHALLENGER 2 PLUS

Trumpeter has released a few different versions of the Challenger 2 over the years. Their latest is a 1:35 scale Challenger 2 with Enhanced Armour, as seen in action in Iraq over the last year or so.

The kit is made up from 420 light grey plastic parts. A fret of ten photo-etched parts, vinyl tracks, a length of brass wire, polythene caps, decals and a printed sheet of MRE ration packs

are also included.

This is not a simple reissue of the last version of Trumpeter's Challenger 2, which was itself an improved version of the very first mouldings. This kit seems to be substantially new, with a completely revised turret, upper hull, current style of perforated wheels in addition to the latest iteration of enhanced armour. Some of the most impressive features are the anti-slip texture of the upper surfaces and in particular the plastic one-piece bar armour sections. I think it would have been nice to have separate track links and maybe also a slide moulded barrel instead of the old version in two halves. Trumpeter also offers the options of building this beast with a dozen blade - nice.

Construction should be

pretty straightforward, with the instructions showing that nothing that appears to be over engineered. Care will be required when attaching the bar armour to ensure correct alignment, but this will be a pure pleasure compared to the alternative prospect of dealing with photo-etched parts.

According to Trumpeter's instructions, you can paint your new Challenger 2 any colour you like as long as it is green, although I am not so sure of the colour recommended - Gunze Olive Green 2. Further research will be needed I would say, but that's nothing too serious.

This looks like a great new kit and will build into a very nice looking Challenger 2. ■



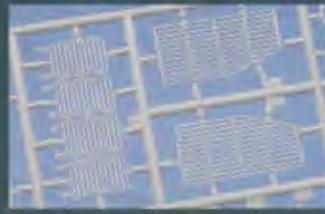
MRE boxes are printed onto a very thin sheet of brown paper.



The upper hull is all new, and features impressive non-slip texture.



The turret is a brand new moulding too.



The single piece bar armour sections are impressively fine, and will save many hours of work compared to photo-etched equivalents.



The perforated road wheels are new to this kit too.



A modest photo-etched fret and a tow cable are included.

Thanks to J.B Wholesalers  
[www.jbwholesalers.com](http://www.jbwholesalers.com)

# Incoming

## AIREDALE CASTINGS

### 1:35 SCALE TYPE 69 CONVERSION

The Type 69 (also known by its industrial designation WZ-121) main battle tank is effectively a Chinese copy of the Soviet T-55 tank and an improved version of the Type 59 Main Battle Tank, with developments in gunnery and engine design. It is a relatively inexpensive and easy to operate tank, but as the first Gulf War has shown, it was completely outclassed and outgunned by almost every adversary. Even so, I have long admired the lines of this vehicle. The saw-tooth side skirt design in particular is most pleasing to my eye.

Airedale Castings has teamed up with master builder Andy Taylor for this release. The Type 69 conversion comes in a very unassuming plain white box that you would probably dismiss at first glance. The contents include well over 150 finely cast resin parts, and a CD that includes 221 high quality walk around photos together with a printable 18 page instruction booklet. The instructions are noteworthy as they are well laid out and easy to follow.

The resin castings include a new hollow turret that has convincing casting texture, side bar armour, new rear engine decking, headlight guards, saw-tooth side skirts, laser range finder, searchlight and a completely new machine gun. I was impressed firstly with the quality of the castings and secondly by the sheer number of them. The saw tooth side skirts are a good example of the detail and research that has gone into this update. They are made up of twelve castings per side, so in effect you can model them in any configuration you like. The contents of the box will let you build any one of a number of versions found in the first Gulf War. At first glance this kit may seem to be very expensive but, give the fact it is hand made, very accurate and is probably the best "out of the box" conversion of this type available in any scale today, it gets my recommendation. The high quality "walk around" shots are the icing on top of the cake.

The only known source for this product at the moment is Airedale Castings and I am very grateful to them for supplying this sample.

Highly Recommended.

Airedale Castings products are available directly from their website  
[www.airedalecastings.pwp.blueyonder.co.uk](http://www.airedalecastings.pwp.blueyonder.co.uk)

Luke Pitt



## GREATWALL HOBBY

### 1:35 SCALE GERMAN INFRARED NIGHT VISION DEVICES

#### 2 IN 1 • ITEM L3515

Greatwall Hobby may not have been around for long, but they have been releasing some impressive kits and accessories. This just adds to the collection.

Inside the box are four sprues of grey plastic parts, two of clear and a small sheet of photo etch, in all a total of 102 parts, and all very well detailed.

The set is for two different variants of WWII German Night Vision equipment - one that can mount onto the cupola of a Panther, the other for an Sd.Kfz. 250/251 Half Track, although you could use it for a 1946 project or a paper panzer.

In summary, this is a very nice set, with excellent detail and options. I highly recommend this set indeed.

Greatwall Hobby products are available from The Airbrush Company [www.airbrushes.com](http://www.airbrushes.com)  
Andrew Judson



## PART

### 1:35 SCALE

#### P35-224 - PZ.KPFW.III AUSF. J/L/N

#### P35-225 - PZ.KPFW.III AUSF. J/L/N STORAGE BIN

#### P35-226 - PZ.KPFW.III AUSF. J/L/N FENDERS

Part from Poland has recently released three photo-etched upgrade sets for Dragon's 1:35 scale family of Panzer III kits.

The first, item no. P35-224, is a detail set for the overall vehicle. This comprises four good sized photo-etched frets that bristle with breathtaking detail. The obvious highlights include replacement vents with the clever impression of woven texture, supplementary armour for the mantlet, smoke dischargers and a huge range of fittings and mounts. With care, many of these may be made workable.

P35-225 is a replacement stowage bin for the rear of the turret. The separate hatch will make this ideal for customising the stowage on your Panzer III models.

Finally, P35-226 is a comprehensive set of replacement photo-etched fenders with separate bolts, rivets and detail parts.

Instructions for all three sets are supplied as clearly drawn illustrations. Study the instructions carefully before commencing construction.

Although much of the detail on these three sets may appear intimidating – and some of it just plain terrifying – there are so many parts provided that you really can afford to be selective about what you choose to install. Just use the bits that you feel make a difference, and that you are capable of actually seeing!

Highly recommended to experienced modellers.

Thanks to Jadar Hobby for the samples [www.jadar.com.pl](http://www.jadar.com.pl)

Brett Green



## VOYAGER MODEL

1:35 SCALE

PE35340 - WWII GERMAN JAGDPANZER IV L/70(V) BASIC

PE35341 - WWII GERMAN JAGDPANZER IV L/70(V) FENDERS

VBS0149 - WWII GERMAN JAGDPANZER FAMILY 75MM L/70 BARREL WITH MANTLET

PE35343 - WWII RUSSIAN JSU-152 BASIC (FOR TAMIYA)

PE35344 - WWII RUSSIAN JSU-152 FENDERS (FOR TAMIYA)

PE35282 - RUSSIAN T-62 MEDIUM TANK MOD. 1962 (TRUMPETER)

PE35282 - RUSSIAN T-62 MEDIUM TANK FENDERS (TRUMPETER)

TE031 - BARBED WIRE PATTERN 1

Voyager Model has been busy with new releases recently. The first topic for review is three sets for the newly upgraded Dragon Jagdpanzer IV L/70(V).

Voyager's so-called "Basic" set, item no. PE35340, is anything but basic. It bristles with fine photo-etched details across no less than six compact frets. Some of the highlights include replacement armour for the sides of the engine deck, dozens of clamps and a star antenna. Another nice touch is the inclusion of casting numbers. In addition to the photo-etched parts, Voyager has included late-style resin replacement exhausts. Several lengths of brass and plastic rod round out this set. PE35341, available separately, offers a full set of replacement fenders and mudguards. Also destined for the same kit is VBS0149 - WWII German Jagdpanzer Family 75mm L/70 Barrel with Mantlet. The turned metal barrel is supplemented with a resin mantlet. Once again, Voyager offers photo-etched casting numbers with this set.

Voyager has released several sets for Tamiya's new 1:35 scale ISU-152 too. PE35343 offers a general photo-etched upgrade, which includes replacement fuel drums, mesh grilles, clamps, chains and much more. Resin caps are supplied for the new fuel drums, while several stencil markings are included on the photo-etched frets. PE35344 is a separate set with the big fenders offered on two photo-etched frets. Soviet and Polish stencil markings are included with this one too.

The next two sets under examination are designed for Trumpeter's recent 1:35 scale T-62 Model 1962. Once again, the "basic" set provides plenty of detail for the vehicle including grilles, clamps and supplemental parts for the cupola. The separate fender set is supplied on one large photo-etched fret with four small resin parts.

Finally this month, Voyager has released a set of barbed wire - TE031 - Barbed Wire Pattern 1.

All Highly Recommended to experienced modellers.

Thanks to Creative Models Australia for the samples [www.creativemodels.com.au](http://www.creativemodels.com.au)

Brett Green



## DIORAMA PLUS

1:35 SCALE

DP4 - SMALL RUINS

DP8 - RUBBLE AND BRICKS

DP11 - LASER CUT SHATTERED GLASS

Diorama Plus from the USA offers a growing selection of full diorama buildings, bases, vignette pieces and accessories.

Set no. DP4 is called simply "Small Ruins". This package includes two large hydrocast pieces for the two-storey building ruin, a bag of "rubble" for the base of the diorama, a set of six laser-cut wooden window frames and a sheet of acetate "shattered glass".

The main castings are made from a hard plaster compound. Casting quality is high, with only minimal cleanup required before assembly. The inclusion of the timber window frames is a nice bonus. Along with the included bag of rubble and the rather clever laser-cut acetate to represent broken windows, all you will need to add is a base for an impressive diorama setting.

The instructions are noteworthy for their comprehensive painting and weathering suggestions. It will be very worthwhile spending some time reading these and experimenting on scraps of material. With the main building made up from only two pieces, assembly will be a breeze. Diorama Plus supplies the Rubble and Bricks as a separate offering in Set No. DP8.

A larger sheet of acetate Laser Cut Shattered Glass may also be purchased as Set No. DP11.

I am suitably impressed with the quality of these diorama products, and I look forward to seeing what else is in the pipeline from Diorama Plus.

Highly Recommended.

Thanks to Creative Models Australia for the samples [www.creativemodels.com.au](http://www.creativemodels.com.au)

Brett Green



## GREAT NORTH ROADS

1:35 SCALE GNR 035 - VIGNETTE RUIN

Great North Roads from the UK is a manufacturer of diorama and vignette pieces.

One of their latest releases is a compact Vignette Ruin.

The circular plaster base is around 18cm in diameter, making it suitable for a small vehicle and several figures. Assembly could not be simpler. The only two additional parts are an Ionic column and its cap. The parts are pretty much ready to assemble straight from the box, so you can focus all of your attention on painting and weathering.

The column and base are quite versatile. They would be suitable for depicting a scene in North Africa or the Mediterranean depending on the use of groundwork and foliage. The era is similarly flexible – anything from the period of Colonial Wars to the two World Wars or more modern conflicts are possible.

Great North Roads' 1:35 scale Vignette Ruin is a simple yet effective and very versatile base for small vehicles and figures.

Highly Recommended.

Thanks to Creative Models Australia for the samples [www.creativemodels.com.au](http://www.creativemodels.com.au)

Brett Green

# IS ACCURACY IMPORTANT IN 1:48 SCALE?

Like a lot of things in life, accuracy and its importance is all about you. I say this because what you may find important, others may not. I used to get pretty upset when I was younger when viewing war films on TV. Why? I thought with all these restored tanks all over the place, why on earth are they using M41 Walker Bulldogs as German tanks!

As I matured two things became abundantly clear. It is all about cost versus what people perceive. This news may shock some who read this magazine, but one tank looks pretty much like any other to the average punter. I ask you this, when in conversation with people outside the hobby how often does the conversation turn to accuracy? My bet is, never.

Accuracy in terms of shape, in my view, is important and being a reviewer it is a qualifier (or one of the measures we reviewers use to judge a kit). A judge at your local competition may also use this to distinguish a gold award from silver. One must ask the question however, how does this reviewer or judge know so much? Are the drawings or plans he is looking at (when

comparing to a model) accurate? Does he have all the current information on hand? The answer, in most cases is more than probably, but, here is the rub, it's all in his interpretation of the data on hand. This can (and usually will be) open to interpretation.

In all my years in the hobby I have seen similar points being debated on a fairly regular basis. Take for example our brothers in the 1:48 aircraft modelling community. There are reviewers that make no mention of engraved panel lines. Why? Because this is now the accepted norm. Are these accurate? No, if a real plane had these engraved lines it probably would not fly! But what happens when the average punter opens the kit? He thinks "nice detail!"

Let's look at another example, the new Tamiya 1:48 Marder III M kit is for all intents and purposes accurate in outline and shape and to be perfectly honest will make an outstanding model right out of the box. The rivets on the side of the armoured fighting compartment are the right size and are in the correct position, but are they accurate? Well no, the real vehicle had domed rivet heads were

the kit examples are flat. Moving to the side armour itself, it's the correct in shape and outline but is a little too thick; Does the average model builder really care? Probably not. He will buy it and build it. That's what's all about, fun.

The simple truth of the matter is the greatest number of kits are purchased by people who really do not care if the kit is 2mm too short or sits incorrectly. What they want is something that goes together well and looks nice when complete. It really is that simple. People like me make up a very small percentage of the purchasing public. There are other cases when all the reviews you read wax lyrically on the latest kit but you may find it is almost impossible to build. My advice here is being open to not one, but a number of reviews (if that what is important to you). It really comes down to the old shades of grey debate, there is no real black and white (in terms of accuracy) but there are an infinite number of shades of grey.

Until next time *Luke Pitt*



## ALPINE MINIATURES

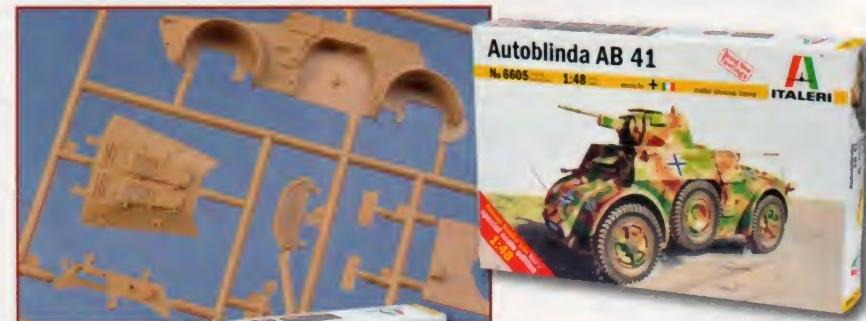
### #48003 GERMAN PANZER CREW

This set is a combination of the first two 1:48 Alpine figures (48001 and 48002) released. The box art shows the two figures assembled and painted by notable Korean artist Man-Jin Kim. These are quite frankly the most impressive painted 1:48 figures I have ever seen. The figures are cast as a main body and legs with both arms as separate. As is the usual practice with Alpine, two heads are included for each figure. The moulding is first class, as is the fidelity of details. In particular, the fabric folds and facial sculpts are outstanding. These sets will be limited to a production run of 300 each.

These two figures set new standards in terms of finesse and fidelity of detail and really have to be seen to be believed.

Highly recommended. Thanks to Alpine Miniatures for the sample www.alpineminiatures.com

*Luke Pitt*



## ITALERI

### 1:48 SCALE

#### KIT NO. 6605 - AUTOBLINDA AB41

#### KIT NO. 6606 - OPEL BLITZ KFZ 305 3 TON TRUCK

Both of these kits have been previously packaged by both Supermodels (in combination with an aircraft) and by Tamiya under licence from Italeri for the Japanese market. Both kits proudly note that they are new mouldings but in reality they are not. What has happened is they are being manufactured in China and packaged by Italeri in Italy. The AB 41 has been reviewed previously and is a pretty good kit with the only real flaw being it's a little hard to put together. With care however, it can be made into a very fine model. The chassis is separate and moulded in white metal (with more detail than you would expect). The tyres are moulded in a soft vinyl and are very well detailed.

The Opel Blitz, on the other hand, has a few shape issues in relation to the cab being a little too curved on top. This can be remedied with a file and sand paper. The hubs are of the early six-hole design and are appropriate as early war examples. The rear wheel hubs are a little off also as the rim is too thick where the rim meets the tyre and basically looks wrong. These will be difficult to fix. With no real aftermarket options available the only option is the scratch build. I can and will recommend the AB41, but the Opel Blitz falls a little short. On the other hand, all the issues are fixable and the Blitz can be made into a fine model as it still has 'good bones'! Thanks to Italeri for the sample www.italeri.com

*Luke Pitt*



## Model Military International 1:48 Scale Q & A - Mike Good

Some call him 'the Dude' while others refer to him as 'the Oracle'. One thing is certain, however. He is one of the best in the business in terms of figure sculpting and painting. It is pleasing then that Mike Good has found the time to answer a few short questions for this column. Mike's talents have found their way into many forms and media over the last decade from plastic figure sculptings in some Monogram 1:48 kits to complete figure and busts for many well-known aftermarket companies. I have always been impressed with his free and flowing style. Mike's figure painting skills are also first class with many gold medals to his credit. It is timely then, with the latest Alpine 1:48 figure release, that the Master joins us today.

### THE INTERVIEW

**Luke:** Mike, I understand that you are not fond of modern figure subjects. What era of figures do you like to sculpt the most?

**Mike:** I do not have a specific favourite, but I have been doing a lot of WWI pilot figures these past few years. Perhaps it would be better to ask which subject I prefer, which are pilots. I have always had a deep interest in fighter planes and that carried over into my figure sculpting.

**Luke:** What scale (size) do you like to sculpt in the most?

**Mike:** It doesn't matter really. They all have their individual challenges and advantages. The best thing about 1:48 scale figures is that they are a bit faster to sculpt having so little surface area to perfect. In 1:48, I can get from planning to finished product in less time.

**Luke:** Seems like you are very diverse and you can sculpt in many different scales/sizes. Why do you think you can easily sculpt in so many different scales/sizes?

**Mike:** I have no explanation for that. I am surprised that many good sculptors have difficulty scaling down from their "usual" scale, or switching gears.

**Luke:** What is the most challenging thing about sculpting figures in 1:48 scale?

**Mike:** Keeping proportions. It is really easy to make things too bulky because you are adding such small amounts of putty. Fortunately, with the little guys it is easier to see them as a whole. With bigger figures you can get lost in the details and lose sight of the whole figure.

**Luke:** What do you think makes your 1:48 figures so realistic? What features are really important to get right?

**Mike:** Proportions and anatomy. A figure will never look realistic if you miss those. It is also important to get the correct proportions on details. This can be tricky on a small figure. The tendency is to make the detail chunky if you are not paying attention. But once you have those things figured out, everything else is just getting it done.

**Luke:** What future do you see with 1:48 scale AFV modelling?

**Mike:** Tamiya seems committed to it and I see a lot of the models at shows. I like the size of the tanks, small without being microscopic. There is a certain delicacy to them you do not see in 1:35 scale. I personally like this size for vehicles. I also think that 1:48 is the ideal scale for aircraft models. That is why I started sculpting figures in this scale in the first place - to go with airplanes.

**Luke:** How much bench time does it take you to produce a 1:48 figure?

**Mike:** Good question. I have no idea. I can usually turn out a couple of 1:48 scale figures in a couple of weeks, if they are not too complicated.

**Luke:** Who are your influences as a sculptor?

**Mike:** Everything I have ever seen or experienced in my life. I am more of a sponge who learns by osmosis than an academic who learns by imitating. Certainly I have learned bits and pieces of things from many people. I could list all the usual suspects. Shep Paine, Bill Horan, Raoul Latorre, and a couple of others not so well known like Terry Worster, Peter Twist and Peter Wilcox. These guys inspired me to sculpt figures and gave me some ideas on how to do that. But I never had a desire to sculpt like anybody else. I always wanted to do my own thing. The one thing that makes a good sculptor (or any kind of representational artist) is observation. Your power to see and analyze and weigh visual cues will determine your ability more than anything else. So observation is probably the most important influence.

**Luke:** It is my belief we need a lot more quality 1:48 scale AFV figures. What are some subjects you think should be done?

**Mike:** Blues singers. No, really! Well, maybe not in 1:48 scale.

**Luke:** Ha good one. What parting advice (apart from having fun) would you give our 1:48 scale readers?

**Mike:** Keep it small, keep it 1:48 small.



## New Products

### EVOLUTION MINIATURES

In keeping with the theme of this column Evolution Figures are set to release a range of 1:48 scale figures and from the look of the photos they look outstanding. I should have pictures of them the next month.

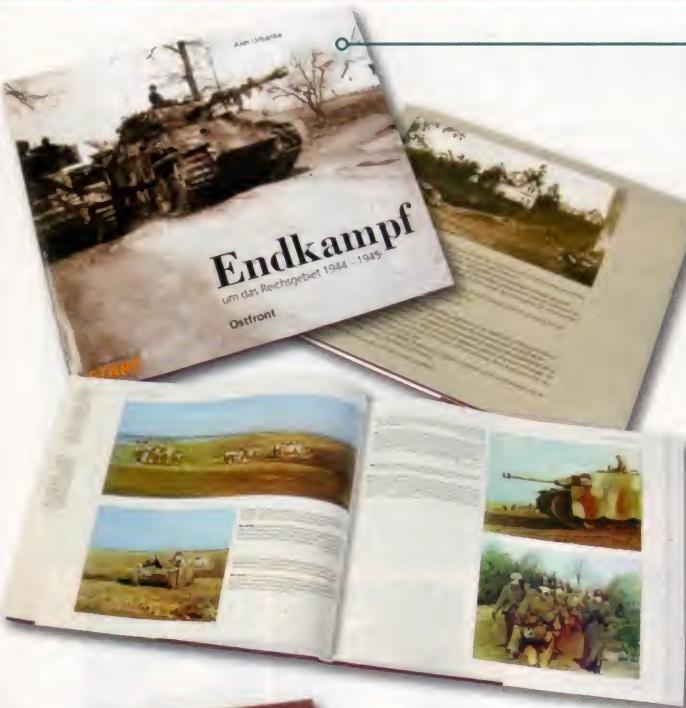


### TOTAL WAR MINIATURES

Manel Arin from Total War Miniatures has released three new figure sets. All of the sets look good in the photographs and I will review them if and when samples come to hand.



# Book Reviews



## ENDKAMPF, UM DAS REICHSGEBIET 1944-1945 OSTFRONT

BY AXEL URBANKE

LUFTFAHRTVERLAG START, GERMANY

ISBN: 978-3-941437-02-9

When I received this book to review, on opening it, I immediately knew that this was something special. "Endkampf, um das Reichsgebiet 1944-1945 Ostfront" is presented on high quality glossy pages between hard cover in landscape format, with text in both German and English and a total of 160 pages.

The book covers the final battle for the Reich in 1944-45 on the Eastern Front. The text is well written, giving a detailed account of the Wehrmacht's final battles between October 1944 and May 1945, in East Prussia, Silesia, Pomerania, on the Oder and in Saxony. Included are various maps to support all actions.

What really is impressive is the photo content, of which the majority is previously unpublished. These are in Black and White and also with a nice small selection of colour pictures. In total there are 186 photos. The subjects of these photos is fantastic, covering from armoured vehicles (Panthers, Hetzers, IS-2s, T34s etc) as well as troops on the ground, giving a good impression of the conditions they had to endure, the terrain, towns and cities where the battles were fought. One picture I found of particular interest was the German Light Cruiser "Leipzig" firing a salvo at Soviet positions from its berth. What a diorama that would make! These photos all seem to have been taken by the men on the ground, making them an intriguing first-hand view of these epic but doomed struggles.

This is an excellent book and well worth adding to your collection, whether you want to explore the full history of this period, or for the fantastic range of photos that will be fantastic inspiration for specific vehicles or diorama scenes.

Highly recommended.

Available from Start-Verlag

[www.luftfahrtverlag-start.de](http://www.luftfahrtverlag-start.de)

Andrew Judson



## OPERATION IRAQI FREEDOM, US ARMY ABRAMS, BRADLEY & STRYKER

BY ANDY RENSHAW AND RYAN HARDEN

SAM PUBLICATIONS

ISBN: 978-1-906959-15-9

We know SAM Publications for their various magazines and great aircraft reference books. Now they have started a new series covering military vehicles. The first in the series is Operation Iraqi Freedom. This is a glossy soft cover A4 sized book, with 127 pages in high quality satin pages. The book covers three vehicles being the Abrams, Bradley and the Stryker. Each Chapter contains an excellent series of colour photos of these vehicles in the Iraq theatre of war, with text covering information about the vehicle itself and its role in the conflict, plus information about the different upgrade projects, such as TUSK.

There is also a series of attractive colour profile drawings, showing the different colours and configurations they come in - very handy when it comes time to paint that project you may be working on.

Lastly in each chapter, for us modellers is a full model build of each vehicle, with many progress pictures and easy to understand captions, showing what kits and other items were used to build these. The standard of modelling work is excellent.

Also in this book is a small chapter on IEDs and the damage they can cause, with some photos to show this. The last four pages are a kitography, giving you all the information you want on the various kits available on the market and also the aftermarket items to improve on them, an excellent resource when building any one of these three vehicles.

This is a fantastic book for both military buffs and modellers alike, pleasing both with what is inside. I look forward to following releases in this series and I am keen to see what is covered in the future.

Highly recommended.

Thanks to SAM Publications for the sample [www.sampublications.com](http://www.sampublications.com)

Andrew Judson



## IN COLOUR 1

### TO THE LAST BULLET

#### GERMANYS WAR ON 3 FRONTS PART 1 - THE EAST

BY DENNIS OLIVER

THE OLIVER PUBLISHING GROUP

ISBN978-0-98065593-44

This latest book from Dennis Oliver follows the same format as his previous releases, beginning and ending with a brief overview of the campaigns. The book kicks off with over four pages of text followed by an Order-of-Battle chart devoted to the formations from March 1945. Sprinkled in this, are eight pretty clear black and white photos of German vehicles. Some reviewers have been critical of this approach, but I find it refreshing. The main reason I would buy this book is for the profiles. Essentially this is a camouflage reference source. Interpretation of black and white photos can be tricky and this book gives a good guide to what the vehicles would look like in colour.

The middle of the book is devoted to 115 colour profiles accompanied by text explaining the profile and in some cases, where the interpretation of the drawing was drawn from. All the main types of "hero" vehicles are covered from the Panzer III all the way up the Tiger 1. The Panther tank, for example, has over 28 profiles devoted to it. The profiles themselves are well drawn and exhibit good colour density.

I really like this book. It does not pretend to be anything other than a profile book. I also like the motivation factor it gave me when looking at the profiles. For me, it has the right blend of historical information with a large lashing of eye candy.

Highly Recommended.

Thanks to Ley Reynolds from Platypus Books for the sample.

Luke Pitt

# MOTOR BOOKS

**CONCORD PUBLICATIONS COMPANY NO: 6529**

## GERMAN SOLDIER ON THE WESTERN FRONT 1914 - 1918

ISBN: 962-361-166-8

This new Concord publication, "German Soldiers on the Western Front 1914 - 1918", is written by Robert Kirchbuel with colour plates by Ramiro Buijero. Consisting of 52 pages, the book gives a brief two-page insight into the development of trench warfare on the Western Front and the life of the German soldiers who manned the trenches.

Broken down into 10 chapters – Individual Soldier, Group Photographs, The Battlefield, In the Trenches, Indirect Fire, Tank, Above the Trenches, POW's, Rear Services and Far From the Front – the author gives a pictorial reference showing the use of personal weapons, uniforms and some of the fighting units that were present on the Western Front during the course of the war.

Containing 135 black and white photographs, many in the posed/portrait style that was typical of the photographs of the era, each photograph has been captioned to give a good description of the scene and point out interesting and unique details. The centre pages include colour plates by Ramiro Buijero. These are an added bonus covering the changes in uniform, materials and equipment that developed as trench warfare evolved and raw materials became scarce. Each plate, covering the years 1914, 1916, 1917 and 1918, comes with a short description of the uniform, weapons and equipment used by the portrayed soldier.

For the modeller this book has some excellent reference photographs and gives some great ideas for a future diorama or two. This book is an excellent photo reference for the modeller and WWI enthusiast alike and is a must have for any library. Highly Recommended.

Thanks to Casemate Publishing UK for the samples  
[www.casematepublishing.co.uk](http://www.casematepublishing.co.uk)

Greg Neal



## KAGERO PUBLISHING

EASTERN FRONT TOP COLOURS 12, ISBN: 978-83-61220-48-0

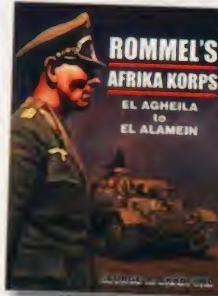
PZKPFW. V PANTHER TOP COLOURS 1, ISBN: 978-83-60445-68-6

Both of these books have been out for quite some time and seem to have been forgotten by the modelling public, which is a shame as both are quite good. From a 1:48 scale perspective, they really hit the mark as they include a 1:48 scale decal sheet for all of the vehicles covered. These are essentially camouflage profile books and, in the Panther's case, cover 47 separate tanks in colour profiles. Interpretation of black and white photos can be tricky on occasion and these give a good guide to what the vehicles would look like in colour. The Eastern Front book covers mostly Polish manned vehicles between 1943 and 1945. I really like these books, with my only "gripe" being I wish they would have given a list of book references where I could find the profiles drawn. The profiles are done to a very high standard and are quite inspirational. The inclusion of decals is outstanding and I hope this will set a trend to include decals by other publishers in future.

If you don't have these I recommend you purchase them, as they really are first class reference sources. Highly recommended.

Thanks to Kagero for the samples [www.kagero.pl](http://www.kagero.pl)  
 Kagero is available in the UK from Casemate Publishing  
[www.casematepublishing.co.uk](http://www.casematepublishing.co.uk)

Luke Pitt



## ROMMEL'S AFRIKA KORPS - EL AGHEILA TO EL ALAMEIN

BY GEORGE R. BRADFORD • STACKPOLE BOOKS • ISBN: 978-0811704199

"Rommel's Afrika Korps - El Agheila to El Alamein" by George Bradford starts with an introduction and the formation of the DAK from the 5th Panzer Regiment of the 3rd Panzer Division and some other units to become the 5th Light Division, later known as the 21st Panzer Division in Germany and then joined by the 15th Panzer Division in Africa. Fighting alongside a considerable Italian force, they were up against the British 8th Army who were numerically superior but with inferior firepower and the victor on the day was usually that with the best (sneakiest) tactic or the deadliest anti-tank shield. With many interesting photos, some in colour, many maps and a host of colour profiles of vehicles from both sides, interesting and easy to read text and including many tables of Organization and Equipment (O/T&E) charts, this is a must have book for anyone interested in the happenings in North Africa during WW II.

However, it does not cover the entire period that the DAK was in North Africa. The period it does cover is from their arrival in February 1941, to the 8th Army breakout at El Alamein in November 1942. It therefore does not include the operations of the Tiger Is in the desert, which did not start to arrive until December 1942.

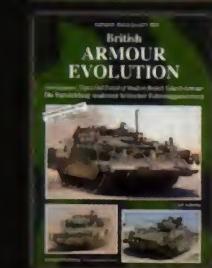
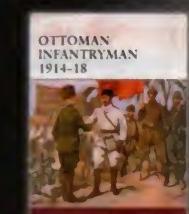
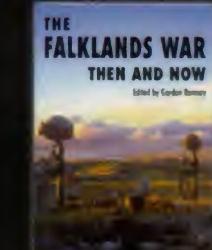
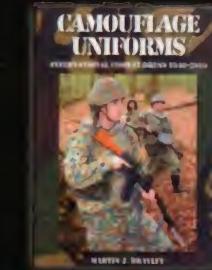
My only criticism is the accuracy of some of the colours used in the artwork, particularly the Caunter Scheme and the captured Italian tanks used by the Australians at Tobruk which I am reliably informed were light green rather than sand.

None the less, this book is highly recommended.

Highly Recommended.

Thanks to Stackpole Books for the sample [www.stackpolebooks.com](http://www.stackpolebooks.com)

Glen Porter



Aviation, Naval, Military Dept  
 13-15 Cecil Court, St Martins Lane, London, WC2N 4AN  
 Tel: 020 7836 5376 • Fax 020 7240 9845

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# Next Issue

## On sale July 1st 2010

### BRITISH PARA

Matt Wellhouser returns with Spearhead Miniatures' big 200mm scale WWII British Airborne Bren Gunner.



### ALL THE LATEST FROM SHIZUOKA

We'll be back from Shizuoka 2010 Hobby Show with all the latest information on new and forthcoming releases.



### TECH GUIDE - Cherbourg Diorama Part Three

We ran out of room in Issue 51, but this time Justo Mira continues his series on a remarkable small-scale diorama.



### ITS A KNOCKOUT!

Jose Brito creates another compact but action-packed vignette, this time with Tristar's 1:35 scale Sd.Kfz.222 armoured car in big trouble!

Due to many influencing factors, we cannot guarantee the appearance of the above projects, but we'll try our best!

...and much more!

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Fax: +44 (0)1525 222574

Editorial enquiries;  
Email: editor@modelmilitary.com

Advertising enquiries;  
Tel: +44 (0)1525 222573  
Email: colin@adhpublishing.com

Subscription enquiries;  
Tel: +44 (0)1525 222573  
Fax: +44 (0)1525 222574  
Email: enquiries@adhpublishing.com

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# The Last Post...



Tamiya's 1:35 scale BT-7 looked very impressive on the sprues and built up. The two crouching crew figures are superb.



The engine deck features louvers visible under a mesh radiator screen, which is folded into shape with the aid of a supplied jig.

## POSTCARD FROM SHIZUOKA

I am writing these last words for this issue from a hotel room in Japan after the opening day of the 49th annual Shizuoka Hobby Show.

### TAMIYA'S 2010 FORTHCOMING RELEASES

Yesterday, Tamiya hosted an event at their corporate head office where they unveiled their forthcoming releases for the coming months.

We were treated to a sumptuous styrene spread that included the contents of the forthcoming 1:35 scale Soviet BT-7. This looked very impressive indeed. The model features offset louvers for the engine deck, covered with curved photo-etched mesh. A forming jig is also supplied to precisely fold the large photo-etch part. Clear parts are included for the headlight lenses and for the large driver's vision block. Several built-up models were also on hand, and they looked very impressive. The two crouching tank crew figures are really first class too.

Other Tamiya releases on display included the re-released SU-85 and SU-100 kits, now with five figures and a set of weathering pastels; and two kits with brand new sophisticated radio control. The 1:35 scale

- engine run-up, acceleration, main gun and machine guns firing. The battle sensor system is very clever too, with hits registering as a red LED on the rear of the vehicle, and also limiting the movement of the "damaged" tank. There are even landmines. When the model runs over a mine, an explosion is heard and the vehicle is partially disabled.

These should be fun for all the family!

### 49TH SHIZUOKA HOBBY SHOW 2010

A number of surprise announcements were made on the first day of the 49th annual Shizuoka Hobby Show.

The biggest news for many was Dragon's all-new 1:35 scale, M7 Priest. This looks to be wonderfully detailed, and the subject will be welcomed by fans of WWII Allied armour. Dragon announced a number of other forthcoming kits, including a Jagdpanther with zimmerit, a 1:350 scale Scharnhorst (German battleship), plus a CyberHobby late version Panzer IV Ausf. H with zimmerit. CyberHobby also had some intriguing box art of an 7.5cm RSO self-propelled gun in 1:35.

Fine Molds had sprues on hand for their two 1:35 scale Japanese trucks, due for release in June.

Dust Game might be better known for fantasy and science fiction, but they have just launched a new line of beautiful resin WWII figures in 1:35 scale. These include several German tank crew figures, two gorgeous US tankers, and a Soviet tank Commander.

We will have a full report on these and all the other military and figure announcements from this year's Shizuoka Hobby Show in the next issue of Model Military International magazine. ■



A Soviet Infantry Officer will be the next addition to Tamiya's 1:16 scale figure range.

Panther Ausf. G and T-34/85 will be familiar to many readers, but Tamiya has added a remote control and combat system that permits the vehicles to move forward, turn and fire at the same time. The system includes realistic sound effects similar to their 1:16 scale cousins



Tamiya staff demonstrated the battle capabilities of the forthcoming remote controlled 1:35 scale Panther Ausf. G and T-34/85.



The 1:35 scale SU-85 makes an encore appearance along with bonus figures and weathering pastels.



The five Soviet tank crew figures included with the SU-85.



Tamiya's earliest wooden models were on display in the Corporate Museum.



# CARIUS' LAST TIGER

**1/35 Scale Military Miniature Series  
Jagdtiger Mid Production Commander Otto Carius**

Item 35307



Tamiya's 1/35 scale Jagdtiger Early Production model kit (35295) is widely acclaimed for its accuracy and engineering. The Mid Production variant to depict the vehicle belonging to Lt. Otto Carius, the legendary German tank ace who destroyed over 150 tanks on the Russian front while commanding a Tiger I, has now been added to the 1/35 MM Series line-up. Thanks to invaluable first-hand accounts from Carius himself, everything from the tank's No.201 markings to the crew uniforms are faithfully depicted. Three lifelike figures are included to depict Carius, a member of his crew, and a motorcycle-riding orderly in a field briefing scene. Differences from the Early Production variant such as spare track link racks, unused side skirt attachment points, antenna, and road wheels with different bolt locations are all accurately reproduced as well. Five types of markings, mainly for vehicles from s.Pz.Jg.Abt 512, are also included.

Mid Production variant details are accurately reproduced and both belt and assembly type tracks are included.



The rear hatch can be opened to reveal interior details while photo-etched engine grilles enhance exterior detail.

**Panzerjäger  
"Jagdtiger" MM-307**  
(Sd.Kfz.186) Mittlere Produktion  
**Komm. O. Carius**



**BRITISH LIGHT UTILITY CAR  
10HP**

Length: 112mm

**British Personality in 1/35 Scale**

Due to popular demand, Tamiya has produced a 1/35 scale model of this unique vehicle. Detailed parts are included to depict several production variations.

**1/35 British Light Utility Car 10hp** Item 35308

TAMIYA, INC. 3-7 ONDAWARA, SURUGA-KU, SHIZUOKA 422-8610 JAPAN



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